FACTORS INFLUENCING CUSTOMER BEHAVIOR TOWARDS AUTOMOTIVE LUBRICANTS IN KENYA'S RETAIL INDUSTRY

United States International University Africa

BY

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A PROJECT REPORT submitted to the Graduate Faculty of Business Administration and Management in partial fulfillment of the course requirements for the Masters in Business Administration Degree.

UNITED STATES INTERNATIONAL UNIVERSITY

April 1999
STUDENTS DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than United States International University for academic credit.

Signed: ..............................................
Erika Wanda

Date: 22/04/99

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ..............................................
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Date: 30/4/99

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ABSTRACT

Lubricants of different oil firms in Kenya differ from one another. This is due to the fact that the firms differentiate them so as to attract customers. This product is commonly differentiated by the addition of additives that change the properties. This differs from the case of fuel that is the same. Fuel (Petrol and Diesel) bought from one oil firm will have exactly the same properties as that bought from another oil firm.

It is, therefore, important for firms to know factors that will affect customers’ behavior towards purchase of oil lubricants.

Whereas choice of a lubricant should be made based on it's performance because it is natural that one would like to buy an excellent performing oil. This is not the case, as few people would actually understand the technical specifications or will have the technical expertise to notice the difference. This means that customers will be influenced by other factors that are looked at in this paper.

This study was exploratory in nature. A random survey was conducted in Nairobi and it's environs using structured questionnaires. A survey was conducted because the solutions given by the literature were generalised and did not present any concrete solution to the problem. The research involved the use of both formal and informal methods because of the sensitivity and secrecy in the oil industry. Formal methods involved the use of questionnaires and looking through company annual reports, catalogues and files. Informal methods involved adhoc oral interviews that involved asking verbal questions and getting verbal replies while promising anonymity of the source.

Analysis and presentation of data and findings was done using Microsoft Excel. I have presented my data in form of tables, pie charts and graphs.

The following factors were found to influence a customer’s decision on the type of lubricant that he will purchase. The quality the customer perceives the lubricant to have, the price, mechanic’s choice, name of the company, location of the service station, advertisements, other services offered to the customer, and petrol attendant’s choice.
These factors have different degrees of influence with perceived quality ranking the highest and petrol attendant’s choice ranking the lowest. Perceived quality is very predominant and the other factors are actually support the perception of high quality which is what the customer is looking for.

A balance has to be met between the quality of the lubricant and the performance of the vehicle. The performance of a vehicle will depend on its age, make and model. Different qualities of oil are recommended for different vehicles e.g. a sports car will take the best quality while a family saloon car will take medium quality.

Firms should take the above factors into consideration when marketing their product. Depending on their strengths and weakness, they should consider what factors to tackle to strengthen their position and reduce their weaknesses. A firm should not go out to address all factors without performing a Strength, Weakness, Opportunity and Threat (SWOT) analysis.
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DEDICATION

I hereby dedicate this thesis to my wife, Francisca Wanda, and my parents Patrick Masette and Tereza Ahanayaka who have supported me in my educational career.
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CHAPTER ONE

1.0: INTRODUCTION

In Kenya, before liberalisation of the oil industry in October 1994, automotive lubricants were provided by the oil firms, which were Esso, Shell, British Petroleum, Caltex, Total, Kobil, Kenol and Agip. Liberalisation, which is the removal of Government price controls from an industry, brought into play new players that included Mobil, Elf, Engen Galana and saw the exit of Esso. All these firms sell lubricating oils that have differences but basically do the same job. With a wide range of choices that do the same job customers will be influenced by some reason to buy a particular type.

None of the lubricating oils available in the Kenyan market are made locally. They are all imported. This is demonstrated by the fact that though Kenol and Kobil are local companies, they both sell engine oil called Castrol that is actually manufactured by a different foreign company. Nevertheless some oil firms in Kenya have blending plants that add additives to alter properties of the oil for various reasons which improve their qualities or viscosity. Viscosity is the thickness of the lubricant.

Lubricating Oils can be divided into mineral oils and synthetic lubricants. Mineral oils are obtained from fractional distillation of crude oil, which is developed from decomposed organic materials. Through time, chemical action, heat and pressure the organic materials changed to crude oil (Mobil Lubricant Handbook, 1998, Pg. 5)

The handbook further states that synthetic lubricants are produced by chemically combining individual units (low molecular weight materials) into unified entity. These are needed to achieve high performance level, which cannot be obtained with Mineral oils.

According to Muncaster, the main functions of lubrication are to:
1. Reduce friction which causes wear, generates heat and consumes energy. This friction includes Sliding friction, Rolling friction and Fluid friction. Sliding friction is the frictional force that exists between two adjacent surfaces that are in motion (Muncaster, 1993, Pg. 33). Fluid friction is the frictional forcepage caused by a fluid due to the fact that it is flowing.
2. Cool heated components. In cars, moving parts tend to get heated. Lubrication is used to cool the parts that get heated.


4. Sealing. It is used as a material that prevents air of liquid from escaping.

5. Cleaning. It is used to get rid of impurities from surfaces e.g. dirt, water e.t.c.

Parts lubricated in a car include:

1. Bearings: These are devices that allow part of a machine to move smoothly (*Oxford Advanced Learner's Dictionary*, 1995, Pg. 91)

2. Gears: These are a set of wheels with teeth on their edges that revolve together to transmit power from a vehicle engine to it’s road wheels.

3. Cylinders in engines. A cylinder is a hollow part in which the piston moves in an engine.

1.1: RESEARCH PROBLEM

Before October 1994, the government controlled the oil industry prices. Automotive lubricant prices were an exception, they were not controlled by the Government. Oil firms set their own prices. Liberalisation allowed more players into the market meaning that competition became tougher. After liberalisation, some differences emerged in some oil markets.

The automotive lubricant market can be divided into four, namely:

1. Retail market, which is the selling of the product through the service stations.

2. Resellers, who include those who want to, buy with the intentions of selling to make a monetary profit.

3. Commercial and Industrial, which include large firms that have a prearranged agreement with an oil firm to supply the product in bulk at an agreed price.

4. Aviation market, that is the selling of lubricants to aircraft firms.
In the retail market, liberalization hardly brought any direct change to the customer behavior. In the Commercial & Industrial sector there was an appreciable change as oil firms improved their backup services and technical support. In the reseller sector we had the greatest change.

Behavior towards lubricants is very significant to the oil firms. This product is commonly differentiated by the addition of additives. Fuels (Petrol and Diesel) are the same; they involve no additives and, therefore, are not differentiated.

Whereas choice of a lubricant should be made based on it's performance because it is natural that one would like to buy an excellent performing oil, this is not the case as few people would actually understand the technical specifications.

The question, therefore, is what factor(s) will influence one's choice of oil?

1.2: SCOPE:
There are different types of lubricating oils used in automotive vehicles for different purposes. These include:
1. Engine oil
2. Gear oils
3. Brake fluid
4. Greases, these are multi-purpose and consist of oil, additives and thickener
5. Wheel bearing greases.

I concentrated on engine oils. This was due to the fact that my preliminary investigation revealed that the other oils are mainly bought due to an association with the engine oil. It is rare for one to drive around searching for a particular type of brake fluid, yet a person can drive around looking for a particular engine especially for an oil change.

The retail market in which about 32% of Kenya's lubricants are sold was looked at (Appendix 1).

1.3: JUSTIFICATION OF THIS STUDY.
Little study has been done in this area, whereas several studies have been done on the
topic of fuels. I believe it is very important to study the area of lubricants because fuels are the same, they cannot be differentiated. In fact different firms' import fuels together to the coast town of Mombasa. It is then transported by pipeline to its various destinations. Lubricants of different firms differ and therefore this differentiating aspect is used to attract customers.

Looking at things from the customers viewpoint is very important because they are the ones buying the products. This concurs with William and Cleland who said that Customers view suppliers and other aspects of their environment differently than do suppliers themselves (William, Pg. 38).

Improper use of lubricant is one of the causes of pollution in Kenya. Kenya is so polluted and the general public has a feeling that Matatu and truck drivers who avoid buying lubricating oil due to the fact that they either want to maximise profits cause this. They do this knowing that they are reducing the life span of the car. The use of lubricants in the proper way will reduce the pollution.

1.4: GOAL AND OBJECTIVES:

GOAL
1. To identify the factors that influence customer behavior in purchasing lubricants.

OBJECTIVES
1. To rank the factors in terms of importance; and
2. To see if and how the factors relate to each other.

1.5: DEFINITION OF TERMS

1. Product: This is the lubricant that one buys.
2. Price: The amount of money (either by cash or credit) one pays for the lubricant.
3. Place or Location: This is where the customer buys the product. In this paper place and location are used interchangeably.
4. Promotion: The activities the companies engage in to convince a customer to buy
their product: In my survey, advertising was a promotional activity looked at.

5. Mechanic: A person who has expertise in the repair and servicing of vehicles.

6. Petrol Attendant: A person employed by a petrol station to put fuel and add lubricant in vehicles.

7. Perceived Quality: The quality a customer thinks the lubricant has, since he/she has got no technical know how.

8. Quality: In this paper Quality is in reference to the customer’s point of view and not the suppliers. In other words, it is actually perceived quality. This is a product attribute that is considered in the data analysis.

1.6: CONSTRAINTS:

1. There was time constraint for collection of data and compiling of the report. This made it expensive to get data and compile within a limited time.

2. I had difficulty in getting information due to the sensitivity of the oil industry.

3. Financial limitations also limited me to a narrow geographical range to sample.
CHAPTER TWO

LITERATURE REVIEW

2.0: INTRODUCTION

There exist different automotive lubricants for petrol and diesel engines. They can be further classified according to their performance or their viscosity.

2.1: CLASSIFICATION OF LUBRICANTS

American Petroleum Institute (API) service classification is used to classify lubricants according to their performance. While Society of Automotive Engineers (SAE) system is used to classify lubricants according to their viscosity’s (thickness).

American Petroleum Institute (API)
This classification is widely used all over the world. The ratings are SA, SB, SC, SD, SE, SG, SI and SJ. The designation “S” stands for “spark ignition engine”. The letters A to J are used to denote the different grades of lubricant. The performance is lowest at grade A and improves up to grade J. Automotive lubricants for Diesel engines are CA, CB, CC, CD, CE, CF-4 and CG. The designation “C” stands for “commercial engine”. CA has the lowest performance which improves gradually to CG (Mobil Lubricant Handbook, 1998 Pg. 5)

According to industry sources, in Kenya automotive lubricants for petrol engines with ratings of SA, SB, SC and SD are banned because their performance is considered too low and therefore obsolete. Automotive lubricants with ratings of SE, SF, SG, SH, SI and SJ are allowed. In the case of diesel engines lubricants with ratings CA, CB and CC are banned for their poor performance while CD, CE, Cf-4 and CG are allowed.

Society of Automotive Engineers (SAE)
Viscosity is the thickness of the lubricant. By the use of additives different viscosity’s can be attained. The Society Of Automotive Engineers (SAE) system classifies oils for use in cars by viscosity’s. (Mobil Lubricant Handbook, 1993, Pg. 7). As evidenced this is widely used in Kenya. Lubricants can further be classified in mono-grades and multi-
grades.

Mono-grades engine oil consists of two types: A low temperature “Winter Grade” whose rating is denoted by the letter W. This oil is made to perform at a lower temperature. There is also a high temperature “Summer Grade” which is rated without the denotation “W”, this one performs at high temperatures. Mono-grade engine oil is made to work either in petrol or diesel engines. *(Mobil Oil Classification, 1997, Pg. 3).*

Mono-grade Engine oils include:
Winter Grade: 0W, 5W, 10W, 15W and 20W
Summer Grade: 20, 30, 40, 50

Multi-grades are developed to perform over wide temperature ranges. This is achieved by the addition of additives called viscosity index improvers during their manufacture. In this case polymers expand with increasing temperature to counteract oil thinning. Multi-grade engine oils can work in both petrol and diesel engines *(Mobil Oil Classification, 1997, Pg. 3).*

Multi-grade Engine oils include:
15W-40, 15W-50, 20W-50

According to industry sources, these terms used to describe engine oils are too technical, so the industry has categorised them into less technical terms. The oils are divided into four categories, which are:

1. Synthetic grade
2. Semi-synthetic grade
3. Mineral multi-grade

According to a sales representative, the performance improves from mineral mono-grade up to synthetic grade. The synthetic grade is most expensive while the mineral mono-grade is the cheapest. The mineral mono-grade was the first oil used for vehicles and plants. It’s performance was then improved to yield mineral multi-grade, which was
obviously more expensive. The best improvement was achieved with the introduction of the synthetic grade, which had the highest performance but was very expensive. To achieve a synchrony between cost and performance, semi-synthetic were made at a cheaper cost than synthetic but lower performance."

"Synthetic grade oil is targeted towards the owners of expensive cars who are interested in tip top performance e.g. sports cars, Benz. Semi-synthetic engine oils are targeted towards the owners of what are normally thought to be good cars e.g. Toyotas, Nissans. Mineral multi-grade is targeted towards the old and cheap cars. Mineral mono-grade towards old and cheap cars as well" said the Sales representative. The choice of engine oil, therefore, highly depends on the value of one's car and the performance expected.

In view of the above facts, there is no harm to the car if the owner of an old car decides to use synthetic grade oil, but there will be an imbalance between the performance he will attain and the cost. The cost will be high and he will not utilize the performance the oil produces. On the other hand an owner of a sports vehicle, using a mineral mono-grade will attain poor performance. It is, therefore, important to match the type of oil to the value of the car.

This definitely implies that one should not just use any engine oil. He or she should use the one best suited for his engine.

2.2: FACTORS INFLUENCING BUYING BEHAVIOR:

According to Kotler consumer behavior is the way individuals, groups and firms select, buy use and dispose of goods and services to satisfy their needs and desires (P, Kotler, 1997, Pg. 171).

These can be broadly categorises into four:
1. Cultural factors

These include the buyers’ culture and social class. Hoecklin defines culture as a shared system of values that dictate what groups of people pay attention to. It guides how the self’s experiences and how the life itself is organized. Each person carries within them learned ways of finding within their experiences (Hoecklin, 1995, Pg. 24). Harris and Moran (1991, Pg. 52) are of the view that the concept of culture is interconnected to and within communication and change. They observe that culture is subject to change depending on the time, place and/or circumstances.

Hoecklin goes on to say that culture is relative and not absolute and that it is learned or derived from our social environment. Lastly it is a collective phenomenon that is about shared values and meanings. It may also be necessary to state that culture has different layers. Hoecklin says that each person carries around several of these layers of cultural “programming”. It is about one’s fundamental assumptions of what it is to be a person and how you should interact with other people. This is what is referred to one’s culture.

Some components of culture which people incidentally use as means for achieving an identity are religion, language, value, artifacts, race and class.

Culture is the most fundamental determinant of a person’s wants and behavior. A child attains culture as he or she grows up. A set of values, perceptions, preferences and behaviors are acquired through the family or institutions they interact with.

In Kenya cultures are obviously seen with tribal behaviors. Culture can be a great determinant to the type of product one buys. For example it is commonly believed that the Luo have a culture of being proud and showy, they will therefore buy luxurious cars and live in expensive places. On the other hand the Kikuyu are known to be misers, they will therefore buy the cheapest car and live simple lives. All in all these are generalizations and stereotypical beliefs because it is possible to find a proud and spending person from the Kikuyu tribe and a Luo living a simple life.

Social classes are relatively homogenous and enduring divisions in a society, which are hierarchically ordered, and whose members share similar values, interests and behavior
(Kotler, 1997, Pg. 173).

Contrary to the belief of many, social class does not mean income alone but could also refer to other factors like education, residential area, occupation e.t.c. Social class will determine what product one would buy, because people in a particular social class show distinct product and brand preferences in many areas. It therefore influences the product or service one buys.

2. Social factors
This is influence from reference groups, family and roles. Kotler further says that reference groups refer to all groups with a direct or indirect influence on the person’s attitudes or behavior (Kotler, 1997, Pg. 176). These groups could be primary groups (those that the person interacts with continuously and informally) such as family, friends, neighbours and co-workers. Or Secondary groups (those that require less continuous interaction) such as religious and professional groups.

Family members are an influential primary reference group. Family members have an influence on one another on what is bought. In most cases the parents influence what they children will buy. For example if the father buys a particular type of oil, then he will have an influence on the choices of his wife and the children since he is considered an expert in this area. If the mother buys a certain household good, she will have an influence on the others since she is considered an expert in this area. Children will rarely have an influence on the parents, this is due to the facts that parents make choices for them.

The roles of a person will influence his buying decisions. Each role carries a status that will influence on what is bought. For example a Chief Executive Officer (CEO) will travel in an expensive car, wear expensive clothes e.t.c.

3. Personal factors
A buyer’s decision is heavily influenced by personal characteristics. These include buyers’ age and stage in family life cycle, occupation, economic circumstances, lifestyle and personality (Kotler, 1997, Pg. 179).
Kotler further says that there are nine stages in a family life cycle. These are: bachelor stage, newly married couples, full nest 1 (youngest child under six), full nest 2 (youngest child six or over), full nest 3 (older married couples with dependant children), empty nest 1 (older married couples with no children living with them but head of work has a job), empty nest 2 (older married couples with no children living with them but head of work is retired), solitary survivor in labor force and solitary survivor who has retired. A choice of purchase will differ in each of the stages.

 Buyers buy different products depending on their ages. For example baby food is eaten in early years. This changes into solid food as the baby becomes of age and then special diet at old ages.

 The occupation of a person will influence his choice. Dalrymple says that a person will make a purchase of a commodity that is suitable to his or her occupation. He gives a good example of a blue-collar worker buying work clothes and shoes while a Chief Executive Officer will buy expensive suits (Dalrymple, 1995, Pg. 75)

 Lifestyle is concerned with the activities, interests and opinions concerning leisure time, work and consumption of buyers (Dalrymple, 1995, 76)

 People's economic circumstances consist of their disposable income, assets, debts, borrowing power and attitude towards spending and saving(Kotler, 1997, Pg. 179).

 In my view economic circumstances are the bottom line in this case. Despite all the factors, it boils down to the economic ability of the individual to purchase the item.

 4. Psychological factors
 A buyer's choice can be influenced by four major psychological factors. These are motivation, perception, learning beliefs and attitudes (Kotler, 1997, Pg. 181).

 Perception is the mental processes through which individuals interpret sensory inputs such as sight, sound, smell etc (Graham and Bennet, 1995, Pg. 427). Perception will therefore depend on past experience, surrounding conditions and conditions within the individual.
Graham and Bennet (1995, Pg. 31) define learning as a relatively permanent change in the repertoire of behavior occurring as a result of experience. For example if a customer bought a product and it worked well, he would continue purchasing that product.

Belief is a descriptive thought that a person holds about something (Kotler, 1997, Pg. 187). He further says that it could be based on knowledge, opinion or faith. Therefore a belief that a product is of good quality will lead to one purchasing it.

Attitude is an individual’s characteristic way of responding to an object or situation. It is based on experience and leads to certain behavior (Graham and Bennet, 1995, Pg. 92). Therefore if a customer has a positive attitude towards a firm, he will purchase its products.

PAST EXPERIENCE

A customer’s buying decision is likely to be influenced by his past experience on the purchase of the product. Hammond, Keeney and Raiffa (Havard Business Review, 1998, Pp. 48-50) said that decision-makers display a strong bias towards alternatives that perpetuate the status quo. The authors further say that people make choices in a way to justify past choices.

Nigel Nicholson (Havard Business Review, 1998, Pg. 142) said “People avoid risky situations and have a tendency to resist change except when dissatisfied.” This shows us that past experience has a role to play in a customer’s choice in purchasing a lubricant.

BUYING PROCESS:

Whereas most people see the buying process as one stage, Kotler explains that it is a five stage process which include:

1. Problem Recognition
2. Information Search
3. Evaluation Of alternatives
4. Purchase decision

5. Post purchase behavior (Kotler 1997, Pg. 192)

Consumers will behave differently in each of the stages. It is, therefore, important for firms to know the stage the consumer is in and react accordingly so as to market their products.

In the problem recognition stage, the buyer recognises a need. He will desire more of the need than he has. This need may be recognised when the buyer sees a product that he wishes or an advertisement of the product (Kotler, 1997, Pg. 192).

In information search, the aroused consumer will search for more information. The prospective buyer pays more attention to advertisements on the product, seeks information from friends or uses past experience (Kotler, 1997, Pg. 193).

In almost all decisions a person has at least alternatives to select from. This could be between brands, rival products or substitute products. It is important to note that consumers are influenced by so many other factors so their ways of evaluation will be thoroughly different (Kotler, 1997, Pg. 194).

In the purchase stage, the consumer will make a brand decision, vendor decision, quantity decision, timing (when to buy) decision and payment method decision. It is important to note that daily purchases require less decision and less deliberation e.g. if I am buying tomatoes, I will give less thought to the vendor or payment method (Kotler, 1997, Pg. 196).

In the post-purchase stage, the consumer will experience some measure of satisfaction or dissatisfaction. This is a stage to be closely monitored. In Kenya this stage became important to firms after liberalization of the economy when new players were allowed into the market (Kotler, 1997, Pg. 197).

2.3: MARKETING MIX VARIABLES:

In today’s markets, it is not sufficient to produce high quality materials and services and hope for customers (Haas, 1992, Pg. 500). Haas goes on to say that the merits of the
products or services must be communicated to the buyers. This means that marketers have something extra so as to attract customers.

Marketers can influence demand by meeting customer needs economically and conveniently with effective communication (Armstrong, 1994, Pg. 48).

The marketing mix is the set of marketing tools that firms use to pursue its marketing objectives in the target market (Kotler, 1997, Pg. 92). There are several marketing tools that companies use to influence customers to buy their products but McCarthy looked at four important ones and called them the 4Ps, Product, Price, Promotion and Place (McCarthy, 1993, Pg. 46).

Lovelock and Young said “Service managers can use marketing tools to encourage customers to modify behavior so services can be delivered in a more productive and economic and efficient manner.” (Havard Business Review, 1979, Pg. 168).

**Product:**

McCarthy defines it as the good or service for the target market (McCarthy, 1993, Pg. 46), whereas Kotler defines it as the firm’s tangible offer to the market, which includes the product quality, design, features, branding and packaging (Kotler, 1997, Pg. 93). The product is the one that gives the customer the value he is looking for. It is actually the value to be attained that is being bought by a customer. Since the customer does not use the product before he buys it, he is therefore purchasing the product based on perceived value.

Perceived Quality also plays an important part in influencing customer behavior towards buying a product. The higher the perceived quality, the more likely the consumer will purchase a product.

**Price:**

Price is the monetary figure assigned to a product or service that covers: (1) costs of production and marketing; (2) returns and adequate profit; (3) matches the value perceived by the buyers; and (4) permits seller to compete in market place (Haas, 1992, Pg. 597).
Point 3 is the one that is relevant in this paper. A customer will buy a product if his perceived value of the product matches the price. Haas further says that perceived value is difficult to quantify because it varies from product to product or from customer to customer.

The price of a product should therefore tally with the perceived value of that product. If it tallies, then the customer will be influenced to buy the product, otherwise he will go for competitor products.

Benson Shapiro (Havard Business Review, 1979, Pg. 135) said that the customer will be sensitive to the price of the product that has a high impact on the cost of the system. In other words the customer will be less sensitive to the price of a product if it has a low impact on the cost of the system.

Pricing is a very important marketing mix variable because it is the only income receiving one. The others involve costs. Unlike other Ps, price is subject to sudden change.

**Place or Location:**
McCarthy defines it as getting the right product to the target market place (McCarthy, 1993, Pg. 97). This tool, therefore, involves activities that the firm uses to make it’s product available to customers. Kotler further says that a firm must fully understand the various types of retailers, wholesalers and physical distribution firms (Kotler, 1997, Pg. 93).

Up to this point in time almost all firms in Kenya undergo heavy costs in distributing their products. Notable examples are Smith Klein Beecham and East African Industries. This heavy cost is incurred in order to make the product available to the customers. An easily available product will influence a customer to purchase it.
Promotion:
Role of promotion is to communicate with the market to stimulate demand for the company's product or service (American Marketing Association, 1960, Pg. 5).

It involves all activities a firm undertakes to communicate and promote its products to the target market. It may do this by advertising, sales promotion, personal selling and public relations (Kotler, 1997, Pg. 93).

Personal selling will have to involve the use of a good sales person as the person will have to convince the customer to buy the product. Robert McMurry (Harvard Business Review, 1961, Pg. 113) observed that a very high proportion of those engaged in selling cannot sell. Mayer and Greenberg (Harvard Business Review, 1964, Pg. 51) further state that "A good salesman must have at least two basic qualities: empathy and ego drive." A sales person with these basic qualities will therefore have greater influence on a customers purchase decision.

Sales promotion involves the giving away of gifts to a customer to induce him to buy a product at that time an moment. This could increase sales but will reduce the cost per unit because of the additional cost of the gifts. John Philips said that firms have to be careful when planning for sales promotions because of the possibility of making overall losses (Harvard Business Review, 1990, Pg. 145)

In Kenya, firms try to use a combination of techniques of attracting customers in order to sell more volumes and increase their market share.

2.4: Hypotheses
1. Choice of lubricant is negatively dependent on price.
2. Choice of lubricant is positively dependent on perceived quality.
3. Choice of lubricant is positively dependent on location
4. Choice of lubricant is positively dependent on your mechanic.
5. Choice of lubricant is positively dependent on other services provided by seller.
6. Choice of lubricant is positively dependent on petrol attendant’s choice.
CHAPTER THREE
METHODOLOGY

3.0: INTRODUCTION

Exploratory type of research design was used. A random survey was conducted in Nairobi and the environs using structured questionnaires. A survey was conducted because the solutions given by the literature were generalised and did not present any concrete solution to the problem.

The research involved the use of both formal and informal methods because of the sensitivity and secrecy in the oil industry. Formal methods involved the use of questionnaires and looking through company annual reports, catalogues and files. Informal methods involved ad hoc oral interviews that involved asking verbal questions and getting verbal replies while promising anonymity of the source.

3.1: DATA TYPE AND SOURCES
Data types used were primary and secondary.

Primary data sources were collected from people who drive cars and influence the purchase of engine oil. This left out those car owners who do not influence the choice of engine oil that is bought and it also excluded those employed drivers who have no say in the type of oil to purchase. It also excluded company vehicles or company maintained vehicles since in most cases these cars are taken to one predetermined place for service or purchase of engine oil. The study area boiled down to those who influence decision-making in the choice of fuel.

Oral interviews with sales representatives of lubricants in the oil industry were the other source of my primary data. Those who agreed to talk to me did so on condition of remaining anonymous.

Secondary data came from company newspapers, magazines, annual reports and magazines. It was very difficult to get reports from the oil firms who consider the reports to be strictly confidential.
3.2 SAMPLING FRAME
My sample size consisted of 100 respondents in Nairobi. I chose Nairobi as a representative sample of Kenya because it has 219 retail stations, which make up 32% of the 699 retail stations in Kenya. I had to limit my survey to Nairobi because of the time and financial limitations. I then took a simple random sample from drivers of cars in Nairobi. I moved in different parts of the city and chose respondents at random.

3.3 DATA COLLECTION METHODS
The research involved the use of the triangulation method. This involves the use of multiple methods to collect data. I used both informal methods and formal methods because of the sensitivity and secrecy of the oil industry.

Instruments used for data collection included:

1) Use of Structured questionnaires
2) Interview schedules. These were highly informal interviews that involved asking verbal questions and getting verbal replies while promising anonymous to the source.
3) Looking at official company records e.g. company newspapers, magazines, annual reports and magazines.

Primary data was obtained by personally administering questionnaires that consisted of both open ended and closed-ended questions to the respondents. I made the questionnaire as simple as possible due to the fact that Nairobi drivers are always in a hurry and will therefore give you little attention. The questionnaire was administered in my presence or in the presence of my research assistant so as to offer assistance where it was required. This ensured that errors due to misunderstanding of the questions were minimised.

I got secondary data from catalogues and personal experience of sales representatives in the lubricant industry.
CHAPTER FOUR
DATA ANALYSIS AND FINDINGS

4.0: INTRODUCTION

95% of the respondents did not have any idea about the technical specifications of engine. Those that differentiated engine based their differentiation on companies. The 5% who had an idea of the technical specifications used the Society Of Automotive Engineers (SAE) system, although they all had no idea as to what the derotation W and the numbers stand for. Most of these 5% did not care about the firm from which they bought their engine oil as long as it met the specifications. They were nevertheless also influenced by other factors in choosing their engine oil.

The data was analyzed using Microsoft Excel. Statistical techniques like comparative analysis, mean distribution were also used. Data was presented in form of tables, pie charts and graphs. A correlation analysis was performed to see how the different factors related to one another. By calculating the mean I was able to get the average response of customers to each factor.

One hundred respondents were used of which these are the results.

My questionnaire included a section in which respondents had to tick how important a factor influenced their choice of engine oil. The respondents had four choices between Very important, Important, Not so important and Not important. I intentionally gave an even number of choices to eliminate those who go for the middle option as a scapegoat.

I gave the choice weights in steps of one whereby I gave Very important a weight of 3, Important a weight of 2, Not so important a weight of 1 and Not important a weight of 0.
FIGURE 1: KNOWLEDGE OF TECHNICAL SPECIFICATIONS

THOSE WHO KNOW TECHNICAL SPECIFICATIONS


This means that firms cannot rely on only excellent technical specifications to influence customers to buy their product. This is due to the fact only 5% would be able to respond positively.

An option of attempting to educate the other 95% about the technical specifications would look like an excellent idea. This option would most likely fail because of the following reasons.

1. It would be a tedious and expensive venture.
2. Customers would become aware that all oils are similar, they would therefore buy from any firm as long as it fits the specifications.

4.1: IMPORTANCE OF FACTORS

IMPORTANCE OF PRICE

Very important = 39.4%
Important = 24.2%
Not so important = 9.1%
Not important = 27.3%
Whereas the price difference between the same types of oil of competing firms is small, about 39.4% still consider the price to be very important and 24.2% consider price to be important. This combination of 63.6% makes the factor of pricing a crucial factor in influencing a customer's choice to buy the product. However, a fairly big percentage (27.3%), does not bother about price because they view prices to be almost similar.

**IMPORTANCE OF QUALITY**

Very important = 60.6%
Important = 24.2%
Not so important = 3.6%
Not important = 12.1%

In reality, this is perceived quality, 95% of the respondents did not have any idea of the technical specifications of the oil they use. Perceived quality is the consumer's judgment
about a product’s overall superiority. Perceived quality can be influenced by price, level of advertising, brand name e.t.c.

Perceived value is one of the most crucial factors as it is noticed with 60.6% stating that quality is very important and a further 24.2% stating it is important. Most of those who do not consider quality as an important factor is because they think all oils are the same and therefore do the same job. Therefore they do not think about quality when buying engine oil.

**IMPORTANCE OF MECHANIC’S CHOICE**

Very important = 45.5%
Important = 9.1%
Not so important = 21.2%
Not important = 24.2%

**FIGURE 4: IMPORTANCE OF MECHANIC’S CHOICE**

![Importance of Mechanic’s Choice](image)

**SOURCE:** LUBRICANTS SURVEY, 1998.

Mechanics play an important role in determining what type of engine oil one buys. This is due to the fact that they are considered experts in this field. People who are especially ignorant about cars often turn to their mechanics for advice and then take it without question.

**IMPORTANCE OF LOCATION.**

Very important = 24.2%
Important = 26.6%
Not so important = 9.1%
Not important = 40%

FIGURE 5: IMPORTANCE OF LOCATION

![Importance of Location Chart]

**SOURCE:** LUBRICANTS SURVEY, 1998.

Fewer respondents consider location of the venue to buy the engine oil an important factor. This is due to the fact that engine oil is topped up or changed once in a while. This is the reason as to why retail stations are often going out of their way to check your oil. If the engine oil is low, then one will most likely top up at that retail station.

**IMPORTANCE OF PETROL ATTENDANT’S CHOICE.**

Very important = 15.2%

Important 18.2%

Not so important = 18.2%

Not important = 48.5%
48.5% of the respondents consider the petrol attendant’s choice as not important. The petrol attendant will obviously give one the lubricant that belongs to the firm he is working since he has no alternative choice. He will nevertheless be in a good position to tell you what type of lubricant to use. The 15.2% who said that the petrol attendant’s choice was important was due to the fact that when fueling, they allow the petrol attendant to check the engine and do the necessary fill ups without asking any questions. On observation a very high percentage of drivers allow petrol attendant’s to check their engine oil but they have some spare oil in case a top up is required.

IMPORTANCE OF ADVERTISEMENTS

Very important = 27.3%
Important = 12.1%
Not so important = 18.2%
Not important = 42.4%
Advertisements are mainly done through the media. About 42.4% of the respondents said that advertisements did not influence them at all, while 18.2% said they were not so important. This high percentage implies that advertisements should be used as an awareness campaign to make customers aware of the product and then used other techniques to influence them. Nevertheless 27.3% were influenced by advertisements, so advertising will perform a double job of creating awareness and influencing.

**NAME OF THE COMPANY**

Very important = 33.3%
Important = 21.2%
Not so important = 12.1%
Not important = 33.3%
FIGURE 8: IMPORTANCE OF NAME OF COMPANY


More than half of the respondents considers a good name of the company to have a positive influence on their purchasing a product. A good company name does not result from a beautiful name but from the firm providing very good services or product. In this case a company with a good quality product, good price, good advertisements and offering other services will have a good name.

On the other hand one third does not consider a good company name to have an influence on whether they will purchase a product or not.
4.2: COMPARISON BETWEEN FACTORS

VERY IMPORTANT

FIGURE 9: VERY IMPORTANT FACTORS


60.6% of the respondents consider quality of the oil to be very important to them when making their choice. As I mentioned before this is perceived quality. This tally's with the expected results. Customers want something with good quality.

IMPORTANT

FIGURE 10: IMPORTANT FACTORS


Location of the service station is the highest in this case, followed by price and quality. This
shows that convenient location of a service station has a positive effect on the choice of engine oil.

NOT SO IMPORTANT

FIGURE 11: NOT SO IMPORTANT FACTORS

[source: LUBRICANTS SURVEY, 1998]
NOT IMPORTANT

FIGURE 12: NOT IMPORTANT FACTORS

```
Percentage of respondents who consider them to be
Not important
```

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Price</td>
<td>30.0</td>
</tr>
<tr>
<td>Quality</td>
<td>10.0</td>
</tr>
<tr>
<td>Mechanic</td>
<td>20.0</td>
</tr>
<tr>
<td>Location</td>
<td>40.0</td>
</tr>
<tr>
<td>Other Services</td>
<td>50.0</td>
</tr>
<tr>
<td>Attendant</td>
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</tr>
<tr>
<td>Adverts</td>
<td>50.0</td>
</tr>
<tr>
<td>Name</td>
<td>30.0</td>
</tr>
</tbody>
</table>

**SOURCE:** LUBRICANTS SURVEY, 1998.

Other services and petrol attendants choice rank highest about 50% each. Advertisements and location closely follow. On first sight someone would think that a respondent must take quality into consideration and would therefore be surprised. The respondents who did not consider quality as important did so because they consider the quality of oil provided by different service stations to be the same. Therefore they do not consider quality when selecting engine oil.
MEAN RATING OF FACTORS

LE 1: MEAN RATING OF FACTORS

<table>
<thead>
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<th>FACTOR</th>
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</thead>
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<td>QUALITY</td>
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<tr>
<td>MECHANIC'S CHOICE</td>
<td>1.75</td>
</tr>
<tr>
<td>LOCATION</td>
<td>1.48</td>
</tr>
<tr>
<td>TIRE SERVICES</td>
<td>1.15</td>
</tr>
<tr>
<td>ATTENDANT'S CHOICE</td>
<td>1</td>
</tr>
<tr>
<td>ADVERTISING</td>
<td>1.24</td>
</tr>
<tr>
<td>WE</td>
<td>1.55</td>
</tr>
</tbody>
</table>

SOURCE: LUBRICANTS SURVEY, 1998 (APPENDIX 2).

URE 13: MEAN RATING OF FACTORS

![Bar Chart]

**Mean**

![Bar Chart with Mean]


The mean can have a minimum value of zero and a maximum value of three. A mean
e of zero will imply that that factor is of no importance; a value of three will mean that the average response of the respondents was very important to that factor.

Reliability is the highest with a mean of 2.33. This implies that on average it is a factor that is regarded to range between important and very important. Price and Mechanic's ice have a mean rating of 1.75 that implies that on average respondents see them important.

One of the company and location follow closely with means values of 1.55 and 1.48 respectively. This means that most respondents lie between an average important and so important response.

Advertisements and other services got an average response of 1.24 and 1.15 respectively. This means that on average customers view them as not so important response.

Respondents viewed the attendant's choice as not important. This is seen in its mean value of one (1).
CORRELATION BETWEEN DIFFERENT FACTORS (VARIABLES)

Correlation coefficients are used to measure how different variables correlate. They range from zero (0) to one (1). A correlation coefficient of zero will mean that the variables are not related at all. While a correlation coefficient of one will mean they are related that is a unit change in one variable will cause a unit change in the other variable in the same direction. A negative correlation coefficient will mean that a change in one variable will cause a change in the other variable in the opposite direction.

The variables being looked at, Quality is a direct attribute of the product that is being purchased. Excel was used to determine if there is a correlation between Quality and the other variables and to what extent they are correlated.

#### FILE 2: CORRELATION COEFFICIENT BETWEEN QUALITY AND OTHER VARIABLES

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>CORRELATION COEFFICIENT</th>
</tr>
</thead>
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<tr>
<td>Quality/Price</td>
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</tr>
<tr>
<td>Quality/Name</td>
<td>0.1</td>
</tr>
<tr>
<td>Quality/Advertisements</td>
<td>0.09</td>
</tr>
<tr>
<td>Quality/Mechanic</td>
<td>0.30</td>
</tr>
</tbody>
</table>

**JRCE: LUBRICANTS SURVEY, 1998 (APPENDIX 2).**

- Quality and Price have a correlation coefficient of 0.24. This is positive, which means as quality increases, price also increases therefore customers associate a higher price with better quality.

- Quality and Mechanic’s choice have the highest correlation of 0.30. A mechanic is considered an expert in the field of car repair and servicing. His choice of lubricant is therefore considered by many to be an excellent choice. Their choices are therefore associated with higher quality.

- Quality and advertisements have a correlation coefficient of 0.09. This is positive but small which implies that few customers associate advertising with better quality.

- Quality and Name have a correlation coefficient of 0.1. This is positive but still small.
means that few customers will associate a good name with increased quality.

e were the dependent variable, this would mean that customers look at price as the 1 factor when buying lubricant. These would be the correlation coefficient between 3 and other variables.

**LE 2: CORRELATION COEFFICIENT BETWEEN PRICE AND OTHER VARIABLES**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>CORRELATION COEFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>e/Quality</td>
<td>0.24</td>
</tr>
<tr>
<td>e/Location</td>
<td>0.29</td>
</tr>
<tr>
<td>e/Advertisements</td>
<td>0.12</td>
</tr>
<tr>
<td>e/Name</td>
<td>0.08</td>
</tr>
<tr>
<td>e/Mechanic</td>
<td>0.06</td>
</tr>
</tbody>
</table>

**JRCE: LUBRICANTS SURVEY, 1998 (APPENDIX 2).**

e and Quality would still retain a correlation coefficient of 0.24. This is positive, which ans that a price increase is related to a quality increase. Therefore customers ociate a higher price with better quality.

e and Location have the highest correlation coefficient of 0.29. This means that a ler price at a certain location would influence a customer to make a purchase from t venue. Customers would therefore be influenced by the location that has a better e.

e and Name and Price and Mechanic have a very small correlation coefficient. This ans that these factors do not influence one another.

e and Advertisements have a correlation coefficient of 0.12. The two factors are itively related. This is due to the fact that when Company's advertise they always er to their price as the best price and this has an influence on customer's decisions.
CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The first objective was to identify the factors influencing a customer's choice of fuel. It involved that the factors Perceived Quality, Price, Mechanic's choice, Name of the company, Location of the service station, other services offered and petrol attendants choice ence a customer's choice but to varying degrees.

Perceived quality was found to be the most significant factor. However, it is not an isolated factor. In fact, it is achieved through the use of other factors. A high price will give the image of better quality although a fit will have to be achieved because high prices can chase away customers. A good company name and advertisements can also influence on perceived quality. A mechanic's choice will give a perception of high quality because he is considered an expert in this field.

Perceived quality being the most critical factor was demonstrated when a lubricant called Dello6200 was endorsed by the Japanese because of the high sulphur content in Kenyan fuels. Sales of Dello6200 went high because the customers view an endorsement from the Japanese to mean high quality. These sales were not sustained because it was later proved to be inferior to other oils.

Price was found to be an important factor, despite them having a little difference. This is supported by the present economy in the country that is so bad that people are looking for any possible way to save.

Petrol attendants' choice is a factor that is considered very important by the leastpondents (15.2%). This is due to the fact that they are not considered fair in their assessment, as they will only recommend the engine oil of the firm that they work for.

A good location (place) will mean that the product will be easily available to the consumers. A product that is not easily available will have fewer customers no matter how good it is.
Advertisements create awareness and continuous reminder to the customers. An advertisement stating that their product is "number one" will receive a couple of believers. Advertisements are more successful in creating awareness other than reminders of the product and its quality.

In the data available, I ranked the factors in terms of their importance to customers as follows:

- Quality
- Price & Mechanic
- Name of the Company
- Location of the service station
- Advertisement
- Other services offered
- Petrol attendant choice

One cannot decide to choose the first factors and ignore the others. They have to take all and every one of them into consideration. As seen from the correlation coefficients, these factors complement each other. To get the best results a marketing strategy that puts these factors into consideration should be put into place.

It is very important to tackle the question of how will one market his products in relation to the stated factors. This was also observed by Ries and Trout (1994, Pg. 100) who said that billions of dollars have been wasted on marketing programs as many managers assume a well-designed, well-executed and well-financed marketing program will work. They state that is not necessarily so and give examples of General Motors and IBM who have got into the problem.

As mentioned previously, it is expected that customers look at the technical specifications and choose the best oil, but as seen only 5% from my survey knew the technical specifications. Firms, therefore, have to find ways to attract the rest of the 95%. Putting in place a marketing strategy that will consider the factors looked at can best do this.

Looking at the Kenyan scenario, the top three companies that are Shell, Caltex and Total have almost equal market share of 24.7%, 22.2% and 21.3%, respectively. These are
national firms with reputable names, which give customers an impression of high quality
Differences in Market share in most cases come about from the other factors.
RECOMMENDATIONS:

It has to be reached between these factors. Each firm should perform a Strength, Weakness, Opportunity and Threat (SWOT) analysis that is look at its strengths and weaknesses and the opportunities and strengths that the environment is offering. This fit may involve taking some factors seriously and the others lightly.

Reis said that a man who chases two rabbits catches neither. He further quotes a manager who said "I would rather be strong somewhere than weak everywhere". This means that focusing a firm in a direction for some time, you improve and therefore have more chances for success. Each firm therefore would tackle the factors allowed by their strengths and try to minimise their weaknesses.

A firm that will go out to tackle all factors without considering it's strengths and weaknesses will have a high chance of failing to achieve it's objectives.

A factor of quality should be taken seriously by all firms. It can be disastrous creating an impression of high quality yet it is the other way round. This may cause a short-term rise in sales but it will be followed by a long-term fall in sales.

Quality should also be looked at from the side of the customer. Bitner said "In practice, services of quality have been dominated by a paper work-driven, standards-based system rather than one more focused on the customer. This is however changing with the introduction of Total Quality Management (TQM)" (Bitner, 1990, Pg. 54).
REFERENCES:


A SURVEY TO DETERMINE THE FACTORS AFFECTING CUSTOMER BEHAVIOUR TOWARDS CHOOSING AUTOMOTIVE LUBRICANTS

I am a student in USIU who is pursuing a Masters in Business Administration (MBA), marketing on. This questionnaire is for my research, which is a requirement for completion of the free course. All information is for academic purposes and will be treated strictly confidential.

Make of Car: _______________________

Do you use a particular type of engine oil? ______

If answer is yes, which type do you use? _______________________

How important are these factors in your choice of engine oil.
(Place a tick on your answer)

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>Very Important</th>
<th>Important</th>
<th>Not so Important</th>
<th>Not Important</th>
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<tr>
<td>Quality of the oil</td>
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<td>Your mechanic's choice</td>
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<td></td>
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<tr>
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<tr>
<td>Other services offered</td>
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<td></td>
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<tr>
<td>Petrol attendant's choice</td>
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</tr>
<tr>
<td>Advertisements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of the Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you know the technical details (specifications) of the oil you use? ______

If you do, what are they?

__________________________________________

Where do you buy your oil?

a) Petrol Station __
b) Garage __
c) Mechanic __

41
## Sales Volume and Market Share for Lubricants
### For the Year 1997

<table>
<thead>
<tr>
<th></th>
<th>MOBIL</th>
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<th>AGIP</th>
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Volume is in cubic metres

**Source:** MOBIL Summary Report of 1997
<table>
<thead>
<tr>
<th>PRICE</th>
<th>QUALITY</th>
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**SOURCE:** LUBRICANTS SURVEY, 1998.
# Calculation of Mean, Standard Deviation and Correlation Coefficients

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**United States International University**

**Africa Library**

**SOURCE:** LUBRICANTS SURVEY, 1998.