MARKETING INTELLIGENCE AS A STRATEGIC TOOL FOR COMPETITIVE EDGE

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ABSTRACT: *"Marketing is becoming a battle based more on information than sales power-Philips Kotler". The impact of competition in the business environment has compelled many organisations to turn around and start scanning the environment for information, so as to have competitive edge over other similar organisation within the industry. Organisation have to embark on efficient and effective marketing intelligence in order to maintain their competitive position in the industry in light of this, the study attempts to investigate how marketing information system could help in achieving or attaining competitive edge. To address these problems of competition, marketing intelligence and the adoption of suitable marketing intelligence system for an organization becomes imperative*

KEYWORDS: Marketing Intelligence, Strategic Tool, Competitive Edge

INTRODUCTION

Information and reliable data form the bedrock of any management decision. They also form the basis for all the diagnostic and prognostic efforts of managers. From a marketing stand point, problems can only be anticipated, identified, analysed and resolved or prevented if accurate and reliable, relevant information can be obtained promptly from both internal and external sources. This overriding importance of marketing information is so obvious that every trained marketing manager or executive makes deliberate and sustained efforts to generate, analyze and use reliable marketing related information.

The marketing environment is changing at an accelerating rate, so the need for real time market intelligence and information had never been more pressing. The shifts are dramatic, from local to national and to global marketing, from buyers needs to buy wants, from price to non- price competition. As companies expand their geographical market coverage, the managers need more information more quickly: as incomes improve buyer become more selective in their choices of goods and services. To predict buyer's responses to different features, styles and other attributes, seller must turn to marketing intelligence. As sellers increase their use of branding, product differentiation, advertising and sales promotion, they equally require information on the effectiveness of this marketing tools.

A central problem for managers today is the management of change and complexity arising from the organization's interaction with the turbulent external marketing environment. However, it is imperative for managers today, to be profoundly sensitive to on-going changes in their environment. It is essential that marketing managers, marketing executive, marketing research officers and other employees of an organisation gain good understanding of how the marketing

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environment is changing. An alertness and sensitivity to the environment is very essential ingredient of business success, survival and longevity, because of the firm's dependence on it for resources inputs and services outputs.

Successful companies take an outside-inside view of their business. They recognize that marketing environment is constantly presenting new opportunities and threats, which can only be detected, collected, analysed and utilized through the use of marketing intelligence and likewise an organisation should understand the importance of continuously monitoring and adapting to that environment. Many organisations fail to see change as opportunity. They ignore or resist changes until is too late. Their strategies, structures, systems and organizational cultures grow increasingly obsolete and dysfunctional.

The need for marketing information as regards the marketing environment of an organisation cannot be over emphasized that is why this research work is highly imperative to today's decision-making, the survival, the success and sustainability of an organisation. Moreover, a better understanding marketing intelligence requires the understanding of concept marketing information system. (This is analysed under the literature review). However, marketing information systems, marketing intelligence systems and marketing research systems are used to gather and analyse data for various parts of marketing plan. These systems can help marketers examine changes and trends to markets, competition, consumer needs, product usage and distribution channels, among other areas. They can turn up evidence of importance opportunities and threats that must be addressed. In carrying out marketing intelligence a manager or marketers needs to scan its environment for useful relevant and up-to-date information about all marketing activities in terms of opportunities and threats in this regard in this section of background of the study I tried in analyzing what environmental scanning is all about while in the later chapters, I will discuss more fully on the issue of marketing intelligence and marketing information system.

The term environment scanning is often used inter- changeably with others such as environment analysis, competitive intelligence gathering and strategic marketing information. In this respect, it could be regarded as marketing intelligence though there is difference however; they both serve the same major function in the marketing environment. Environmental scanning is a process by which marketing managers and executives probe and monitor the business environment to determine the opportunities for and threats to the organisation. This is also a means through which managers perceive and events in the marketing environment. The effectiveness of planning in any organisation is found to be directly related to the capacity of management for environment scanning.

As an organization increases in size and complexity the need for marketing intelligence also increases simultaneously. When addressing the issue of marketing intelligence certain questions needed to be addressed:

1. What environment do firms need to scan or probe?
2. What information in the environment does the firm need to gather?
3. What are those necessary, relevant and up-to-date consumers need and want (in terms of information do we need to have as an organisation?

4. Of what relevance is this information?
5. What techniques are available to marketing executives or managers for scanning?
    The above questions coupled with the following questions, make the marketing intelligence indispensable in the modern market.
a. What kinds of people buy our product?
b. What do they value?
c. What do the buy?
d. What kind of new product would they like to see in the market?
e. Why the sudden change in consumers buying patterns?
f. What if our competitors are attracting more consumers and why?
g. What would be the effect of changes in the price of our product?

These and other related questions are the key to informed marketing decision making. As we already know that a prerequisite for the adoption of a marketing orientation is knowledge about consumers and other aspect of the marketing environment that affect organisations operation's managers obtain information by informal and formal means. Casual discussion with customers at exhibitions or through sales calls can provide valuable informal information about their requirement, competitors activities and future happening in the industry. Some companies particularly those who have few customers, rely on these types of interaction gathering to keep abreast of market changes.

As the customer base grows, such method may be inadequate to provide the necessary indepth marketing knowledge to compete effectively. A more formal approach is needed to supply information systematically to mangers. The research work focus on this formal method of information provision. Marketing intelligence is important since the quality of the marketing information affect the effectiveness of decision making Irrespective of the sector of the economy or market an organisation operates, there is always a rivalry among the various player (the organisations) in this sector, and each organisation need to device means of existing, sustaining and becoming a mega force to be reckoned with in this sector. Many organisations believe in the use of price as a strategic tool in their various competitive market environment, however, one thing that must be understood is that whether or not an organisation engages in price or non – price competitions to have competitive advantage over others. It is still precipitated to good use of marketing intelligence, the monitoring of marketing activities for vital and essential information.
 Many factors have increased the need for more and better information as companies becomes national and international in scope, they need more information on larger, more distant markets as income increase and buyers becomes more selective organisation need better information about how buyers respond to their different products and appeals. As organisation uses more competition, they need information on the effectiveness of their marketing strategic tools. In today's rapidly changing environment managers need up-to-date information to make timely decision.

REVIEW OF RELATED LITERATURE

Neisbitt (1999) suggests that the world is undergoing a "mega shift" from an industrial to an information based economy. He found that more than 65 percent of the US workforce now works

at producing or processing information compared to only 17 percent in 1950 using improved computer systems and the other technologies, companies can now provide information in greater quantities. His study revealed that with companies offering all the information now available through the super mark scanners, a brand manager gets one million to one billion new members each week. As Neisbitt points out: "Running out of information is not a problem, but drowning in it is".Marketers frequently complain that they lack enough information of the right kind or have too much of the wrong kind.

Regarding the spread of information throughout the company, they say that it takes great efforts to located even simple facts. Subordinates may withhold information that they believe will reflect badly on their performance. Often, important information arrives too late to be useful, or on- time information is not accurate. Companies have greater capacity to provide managers with information, but have often not made good use of it. Many companies are now studying their managers' information need and designing information system to meet those needs.Despite their early success, Black and Decker continue to listen to its customers within a few months of the quantum introduction, the company held a three – day phonation to gather the thoughts of 2,500 customers concerning then new quantum tools. As fortune Magazine (May 1, 1995, 121 -126) reported, Nearly 200 employees – assembly – line workers, marketing executives and everyone in between – flew from around the world to the company headquarter in Towson, Maryland, where the cafeteria had been set up with phone Banks, computers and in the word of quantum Program Manager Clifford Hall, lots of Pizza" says he, "we want everyone associated with quantum here, what the consumer has to say" all of this marketing intelligence appears to be paying off handsomely. According to one industry analyst, "Black and Decker has become very good at taking market share away from rival companies. They just know their customers'.

In order to produce superior value, satisfaction for customers and to earn competitive edge, companies need information at almost every turn. Vi point Pharmaceuticals, a first Collins, Colorado, marketers of oral hygiene products grew from start –up sales of $13,000 to $37million in 10 years. The company credits its success to it relationships with its customers both consumers and dentists which the compilation of individual information files, helped to establish. Similarly, relationship marketing has been strengthen for the Bank of A levy, of ventures California, by its implementation of a system that catalogs and sort marketing customer files. Manipulation of individual customer files through some database marketing program is becoming increasingly important to relationship marketing. (Source: Business week, June 1997).

Glaxo incorporation, a pharmaceutical maker in Research Triangle Park, North Carolina, spends about $2million a year on its sales and marketing decision support system for hardware, software, user training and personnel. Donald Rao, manager of marketing analysis and decision support at Glaxo, claims a return on investment of 1,000 percentages since the systems development in 1987. The system provides detailed data on physician locations within sales territories which allow managers to fine – tune marketing plans and product sample allocations. In addition it allows substantial savings in managerial time.

Competitive intelligence gathering has grown dramatically as more and more companies are now busily snooping on their competitors. A recent survey of button line magazine (2001 edition), 250

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companies found that 80 percent had some type of business intelligence strategy in place. Techniques range from quizzing the company's own employees and bench marking competitor's product to surfing the internet, lurking around industry trade show and roofing through rival's trash – bins.

According to the chief of corporative intelligence for Ryder system, Inc (1995), "Eight percent of what you need to know can be found by talking to your own employees". Here is an example of how listening to its own people paid off for Xerox. In early 1995, a Kodak copier salesman to Xerox technician that he was being trained to service Xerox products. The Xerox employee told his boss who passed the new to the intelligence unit. Using such clues as a classified advert, Kodak place seeking new people with Xerox product experience; they verified Kodak's plan – code-named Ulysses to service Xerox copiers". The warning allow Xerox to device a scheme to (Protect its profitable service business through its) total satisfaction guarantee, which allow copier returns for any reason s long as Xerox did the servicing. By (the time) Kodak launched its plan Xerox had been trumpeting its (programs) for three months.Companies can get to know competitors better by buying their products or examining other physical evidence. For example, to design the first Taurus models, Ford compiled a list of more than 400 features its customers said they liked bet about competing cars. Then, it matched or topped the best of the competition. The result Taurus soon became America's best-selling cars.

According to fortune magazine (May 14, 1984, 29-33) on the article titled " How to snoop on your competitors", the growing use of marketing intelligence raises a number of ethical issues.The internet provides quick and inexpensive access to a rich assortment of intelligence information. By simply checking competitors website, a company can gain important details concerning rival's products, prices, promotional campaign and overall marketing strategies. Using internet search engines such as yahoo or info seek; marketers can search specific competitors' names, events or trends and see what turns up. One website (www.fuld.com) even provides a competitive intelligence guide offering sleuthing tips.

MARKETING INTELLIGENCE SYSTEM: AN OVERVIEW

To augment the literature review, analysis of what marketing information system, marketing intelligence, market research, competitors marketing advantage and environment are emphasized coupled with other related work on these concepts.

MARKETING INFORMATION SYSTEM

In any organization, marketing occupies an important role in its organizational set –up. Its purpose is centered on fulfilling the critical function of integrating the organization with the society. The application of marketing information system was mention for the first time in marketing research department around 1910 in United States of America. A market oriented firm needs to have knowledge of the people and market that it is operating with.Philip Kottler (2001) in his book "Marketing Management Implementation Analysis and Control" approach marketing information system through a continuing and interacting structure of people, equipment and procedure used to gather, sort, analyze and disseminate pertinent timely, and accurate information for use by marketing planning, implementation control. Marketing information system can be described as a

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formal effort by management to systematize the flow of information needed by a marketer so that marketing will be more available and useful to him. There are arguments that marketing information system is a structured, interacting complex of person(s), machine and procedures designed to generate an orderly flow of information sources for use as input to marketing decision makers.

Marketing information system could equally be seen as an open system encompassing certain types of major information flows within a business organization and its environment. Marketing information is defined as marketing information system as an orderly procedure for the regular collection of raw data both internally and externally and the conversion of these data into information for decisions. Marketing information system is seen as a process applied within a large company, senior management with devotes considerable time and financial resources to realize that not only do people materials plants and money needs to be managed, but also does information. Marketing information system seems to have been pioneered by Charles C. Parlin who started a marketing research department around 1910 in Curtis publishing company, and then the advertising space could be sold more effectively by presenting organized market data to prospective advertising buyers.

Agbonifoh (1998), marketing information system may be define as "a set of procedures and method for the regular planned collection, analysed and presentation of information for use in making marketing decision.The value of marketing information system, for any marketing organization to succeed, it needs a regular supply of current and relevant information for marketing decision- making. In order to be useful such information must be regular, timely, relevant and accurate.The operation of a marketing information system involves huge financial outlays. Therefore, a cost benefit analysis is relevant. Information should not be gathered, just because they are requested by decision makers. It is necessary to ensure that they are likely to help improve the quality of decision made and that information. Although the benefits of the information are not easy to assess such benefits would most certainly be related to:

a. the ability of the information to reduce uncertainty
b. The magnitude of uncertainty, in the decision situation
c. The magnitude of the economic results of the decision

In designing a marketing information system due regard must be paid to the information requirement of managers.Information need tend to be differing from company to company, and from industry to industry because different companies and different types of customers, are affected by different environmental variables and are subject to different kinds and levels of competition. Even companies in the same line of business may differ in their need for information because of differences in internal factors and mode of operation:

It is certainly very difficult to discuss all the frequently needed information but generally, they fall under two categories internal and external. Some of the frequently needed items of information are:

1. Sales Data for the company as well as its competitors. Sales analysis on the basis of distributors, territories, and customer groups are important in sales forecasting. Breakdowns by products lines, months or quarter and by brands are also useful. Sales reports enable the company to measure its market share, market position and to determine its sales potential for the future.
2. Cost Data: These are also needed for planning and control. Profit margins cannot be measure without cost data which include both production and marketing costs.
3. Market Data: Marketing Information such as competitors, actions, consumer complaints products performance, market share information and demand and supply situation are important so also are, market responses to price, product and promotional changes.
4. Customer Behaviour Data: Consumer behaviour is a major concern of every business organization. Every organization wants to know who his present and potential customers are. Why, when, what and how often they buy as well as their buying intention. Also the distribution of its customer by age, social class, occupation, sex, marital status, life style and usage rage is extremely useful.Some firms have developed marketing information systems that provide management with rapid and incredible details about buyer wants, preferences and behaviour. For instance, the coca-cola company knows that we put 3.2 ice cubes in a glass, see of its commercial every year, and prefer cans to pop out of vending machines at a temperature of 35 degree. Kimberly- Clark, which makes Kleenex, has calculated that we spend about 35 minutes each week vacuuming sucking up about 8 pounds of dust each year and using 6 bags to do so.Marketing also have extensive information about consumption patterns in other countries. On a per capital basis within Western Europe, for example, the Swiss consume the chocolate, the Greeks eat the most cheeses, the Irish drink the most tea and the Austrian smoke the most cigarettes.

Nevertheless, many business firm lack information sophistication, many lack a marketing research department. Other has departments that limit work to routine forecasting, sales analysis and occasional surveys. In addition, many managers complain about not knowing where critical information is located in the company, getting too much information too late and doubting the information's accuracy in today's information enjoy a competitive advantage. The company can choose its markets better, develop better offering, and execute better marketing planning.Every firm must organize and distribute a continuous flow of information to its marketing managers. Companies study their managers, information needs and design Marketing Information System (MIS) to meet these needs. A company's marketing information system should represent a cross between what manager's think they need, what managers really need and what is economically feasible. An interval MIS committee can interview a cross section of marketing managers to discover their information needs. Some used questions are;

❖ What decision do you regularly make?
❖ What information do you need to make these decisions?
❖ What information do you regularly get?
❖ What special studies do you periodically request?
❖ What information do you want that you are not getting now?
❖ What information would you want daily? Weekly? Monthly? Yearly?
❖ What magazines and trade reports would you like to see on a regular basis?
❖ What data analysis programme would you want?
❖ What topic would you like to keep informed of?

❖ What are the four most useful improvements that could be made in the present marketing information system?

THE STRUCTURE OF MARKETING INFORMATION SYSTEM

In order for marketing information system to function properly, the structure of the system must be clearly understood by the user. According to Kottler (2003), a marketing information system is developed from medical record system, marketing intelligence, marketing research system and marketing decision support analysis.

Internal Record System: The most basic information system used by marketing executives is the internal reports system. This system records sales, order, stock, prices, cost, inventory levels, receivables, payables and basic financial information. By analyzing this information marketing managers can spot important opportunities and problems.

Marketing Intelligence System: This can be described as the set of procedures and sources used by managers to obtain everyday information about pertinent developments in the marketing environment. These facts about the development in the environment are disseminated to the executives to be used as a basis for marketing decision.

Marketing Research System: This is the systematic design, collection, analysis and reporting of data and findings relevant to a specific marketing situation facing the company. This system comes out as a specific study of a situation so as to promote enough information, which will help the marketing manager to make intelligence decision about the situation.

Marketing Decision Support Analysis: Marketing decision support system is a co-ordinated collection of data, systems, tools and techniques with supporting software and hardware by which an organisation gathers and interprete relevant information form business and environment and turns it into a basis for marketing actions.

Marketing Intelligence System (MIS)
Marketing intelligence is everyday information about development in the marketing environment that helps managers prepare and adjust marketing plans. The marketing intelligence system determines the intelligence needed, collect it by searching the environment and delivers it to marketing manager who need it.Marketing intelligence comes from many sources much intelligence is from the company's personnel executives, engineers and scientist, purchasing agents and the sales force. But company people are often busy and fail to pass on important function.The company must "sell" its people on their importance as intelligence gathers, from them to spot new development and urge them to report intelligence back to the organisation.

Companies also buy intelligence information form outside supplies. Dun and Bradstreet is the world's largest research company with branches in 40 countries and a turnover of $1.26 billion. Its largest subsidiary is Nielsen which sells data on brand shares, retail prices and percentage of stores stocking different brands. Its info Act workstation offers companies the chance to analyse data from three sources on the PC's retail index, which monitor consumer panel. Alliance between

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marketing research companies allow access to pan-European Research. Other big international research companies are WPP, Nelson, which owns AGB, GFK, MAL, which owns NOP, and infratest.

Marketing intelligence can work not only for, but also against company. Companies must sometime take steps to protect themselves form the snooping of competitors. For example Kellogg's had treated the public to tours of its plants since 1906, but recently closed its newly upgraded plant to outsiders to prevent competitors from getting intelligence on its high- tech equipment. In Japan Corporate intelligence is part of the Industrial culture. Everyone from assembly – line – workers to top executives considers it their duty to filter intelligence about the competition back to management. Western companies are less active, although most of America's fortunes 500 now have in- house corporate intelligence units. Businesses are becoming increasingly aware of the need both to gather information and to protect what they have.

Some companies set –up an office to collect and circulate marketing intelligence. The staff scans relevant publications, summaries important news and sends news,bulletins to marketing managers. They develop a file of intelligence information and help managers to evaluate new information.

DATA BASE MARKETING

Any aspect of marketing intelligence is database marketing. A significant technological innovation is database marketing, the collection and use of individual customer- specific information to make marketing more efficient. The term data base refers to customers' prospect information stored in a computer with software to process the information. Computer technology provides the ability to pull apart and recombine information in ways previously impossible knowing which customers are more predisposed to which products allow a firm to fails or marketing efforts to individual customers and this is one of the objectives of marketing intelligence. Development in information technology has brought about enormous alterations in the field marketing. Technology invented in electronics media has increasingly helped companies reach wider audience making the world one global market for advertisers. Satellite and able stations have helped a great deal in trimming marketers audiences to the specific groups aimed at improving on the mass audience appeal of television and radio stations. Since there are relatively few products and services that are appealing to everybody at the same time, organisation are now looking into ways of building and utilizing the database of existing and potential clients and using same in analyzing and drawing its marketing strategy. A database helps in organizing information about prospects and customers in such a way that less time is spent on building a comprehensive profile.

In many cases, companies carelessly throw data around and away without knowing how to make proper use of these for business advantages. But with such data residing in database system, meaning information can be joggled out. A study revealed that for the 1973 cost of maintaining a client database of 1000 + names, an organisation can afford to maintain half a million with the same amount with computing power. This trend is fast improving, with database technology marketers can now deal with their clients directly as individuals in a larger number and with greater ease such direct marketing win in the long run help reduce the cost of sales and intermediaries will be greatly reduced, if not totally eliminated form the sales circle.

An added advantage of database marketing is that, it give a good knowledge of present customers, to analyse how to retain same and expand to other frontiers can be easily enhanced using a good data management system. As the saying goes "best place to increase a market is in the present satisfied client list". Time resources usually invested in sales exercise is also greatly reduced through database marketing. Sales people avoid wasting time on frivolous calls and are better able to make sure efforts are rightly directed to ensure high rates of business successes, with the world wide web (www), marketing is fast shifting to the internet, individuals, organisation, agencies and government parastatals willingly displays information about themselves for other to access them easily. This opens a new ground of direct marketing where business meeting are done more on a one-on-one level electronically. Time and cost of business are saved and opportunities for wider audiences are better explored for an overall optimization of business results.

Why Increased Need for Information
Marketing intelligence system is necessary because of the fact that environment factors within which a firm operates are dynamic in nature. This ever – changing nature of the marketing environment makes it imperative for every marketer to manage his or her marketing information effectively. Marketing information especially in Nigeria is needed because of the following reasons.

Accelerating Environment Change: The impact of the acceleration environment change and this has lead to where the target markets are moving more rapidly and in accustomed patterns. While new target are appearing others are either growing or diminishing in size. The old strategies and tactics are no longer appropriates as they are changing rapidly. Technological change affects product life cycles, channels of distribution, marketing activities. Government regulations affect advertising, pricing, labeling, packaging, distribution and many others. In the same vein has reaffirmed these marketing imperatives sequel to the changes in the marketing environment.
These entire boils down to one thing- the environment must be monitored frequently.

Uncertainty of The Future Event: The heart of the marketing management task is managing the future. Indeed the managers are surrounded by information that is pertinent to this task. Therefore, marketing information needed to harness and organize this information in such a way that it will aid the manager in forecasting as well as in controlling current marketing activities.

Complexity of The Marketing Activities: As more and more competitors enter the market place, the need for a company to survive call for the need to monitor and collect information as well as analyzing the information to know the strength the weakness, the opportunities and the threats of both its competitors and the environment. This could be also be referred to as competition.

More and More Areas to Make Decision About: As organizations compete, so do the area to make decision multiply. This also creates greater information needs. The number of products being sold and the market been saved by many organization have increased. Each product requires different market combination strategies and tactics. To make these marketing decisions, more and more information will be needed and analyzed.

Low Quality of Made – In Nigeria Goods: Low quality of made –in- Nigeria goods demands for adequate information. This is necessary because consumers who are dissatisfied with made-in – Nigeria goods have formed an idea against it. To erase this, adequate information is necessary so that the quality of the product to be produced is improved to suit the taste of the consumers.

Shortage of Raw Material: In Nigeria raw material are inadequate and the available ones are highly competed for, hence, Nigeria companies needs to search for pertinent information that can assist them in making the best use of the available raw material. To do this in efficient and effective ways additional information is required on the part of the concerned company.

Information Processing Technology: With the advert of advanced information processing technology, more information processing technology, more information can now be processed more rapidly, with greater accuracy and accessibilities than ever before, having the computer to provides the managers with exceptional reports and remove him from normal crisis management loop to which he now devotes much of his day-to day activities.

Benefits and Uses of Marketing Intelligence:
i. For decision making: Marketing intelligence system is an important instrument in gathering relevant information for the marketing managers, executives and managements in making decision under certainty, uncertainty and risk.
ii. Marketing Intelligence provides a faster, less expensive and more complete information for organizational uses.
iii. The storage and retrieval capacity of a marketing intelligence system allows a wider variety of data to be collected and used. This is so because marketing information system organizes incoming data in a database so that it is available when it is needed.
iv. It enables marketers to make and get better decisions. This is possible because marketing intelligence system provides marketing managers with a decision support system.
v. It helps marketers to monitor the performance of the products, sales people and other marketing units in greater details and if there is any deviation, the concerned party will be aware.
vi. It makes marketing managers greedy for information. This is so because once marketing managers see how it can help in their decision making, they are eager to get more information.
vii. It helps in market segmentation
viii. It is effective tool in both price and non price competition.
ix. If well managed it gives an organisation competitive edge in a competitive business environment.

MARKETING DECISION SUPPORT SYSTEM

A growing number of organisations are using marketing managers make better decisions. Little (1998) defines a marketing decision support system (MDSS) as a coordinated collection of data, systems, tools and techniques with supporting software and hardware by which an organisation gathers and interprets relevant information from business and environment and turns it into a basis for marketing actions.
Once in a year, marketing news lists hundred of current marketing and sales software programs that assists, in designing marketing research studies, segmenting markets, setting prices and

advertising budgets, analyzing media and planning sales force activity. Here are examples of decision models that have been used by marketing managers.

❖ BRAND AID: A flexible marketing mix model focused on consumer packaged goods whose elements are a manufacturer, competitors, retailers, consumers and the general environment. The model is contains sub models for advertising pricing and competition. The model celebrated with creative branding of judgement, historical analysis, tracking field experimentation and adaptive control.

❖ CALL PLAN: A model to help sales people determine the number of calls to make per period to each prospect and current client. The model takes into account travel time as well as selling time. The model was tested in the United States airlines with an experimental group that managed to increase its sales ever a matched control group by 8 percentage points.

❖ DETAILER: A model to help sales people determine which customer to call on and which products to represent on each call. This model was largely developed for pharmaceutical detail people calling on physicians, where they could represent no more than three products on a call. In two applications, the model yield strong profit improvements.

❖ GEOLINE: A model for designing sales and services territories that satisfies three principles. The territories equalize sales workloads, each territories consists of adjacent areas and the territories are compact several successful application were reported.

❖ MEDICAL: A model to help an advertising buy media for a year. The media planning model includes market- segment delineation sales potentials estimation, diminishing marginal returns, forgetting, timing issues and competitors media schedules.

Some models now claim to duplicate the way expert marketers normally make their decision, some recent expert system models includes:

▪ *PROMOTER*: Evaluations sales promotions by determining baseline sales (what sales would have bee without promotion) and measuring the increase over baseline associated with the promotion.

▪ *AD CAD*: Recommends the types of advertising (humorous, slice of life and so on) to use given them marketing goals, product characteristics, target marketing and competitive situation

▪ *COVER STORY*: Examines a mass of syndicated sales data and writes English Language memo reporting the highlights.

QUANTITATIVE TOOLS USED IN MARKETING DECISION SUPPORT SYSTEM

1.   STATISTICAL
a.   Multiple regression; A statistical techniques for estimating a "best fitting" equation showing how the value of a dependent variable varies with changing values in a number of independent variable. Example: A company can estimate how unit sales are influenced by changes in the level of company advertising expenditures, sales force size and price.
b.   Discriminant Analysis: A statistical techniques for classifying an object of person into two or more categories. Example: A large retail chain store can determine the variables that discriminate between successful and unsuccessful store locations.
c.   Factor Analysis: A statistical technique to determine the few underlying dimension of a lager set of inter collected variable. Example: A broadcast network can reduce a large set of Tv programs down to a small set of basic program types.

d.   Cluster Analysis: A statistical techniques for separating object into a specified object into a specified number of mutually exclusive groups such that the groups are relatively homogenous. Example: A marketing research might want to classify a set of cities rite four distinct groups.

e.   Conjoint Analysis: A statistical technique whereby respondents ranked preferences for different offers are decomposed to determine the person's inferred utility function fore each attribute and the relative importance of each attribute. Example: An airline can determine the total utility delivered by different combination of passage services.

f.   Multi dimensional Scaling: A variety of techniques for producing perceptual maps of competitive product or brands. Objects are represented as points in a multidimensional space of attribute where their distance from one another is a measure of dissimilarity, Example: A computer manufacturer want to see where his brand is positioned in relation to competitive brands.

 2   MODELS

a.   *Markov- Process Model*: This model shows the probability of moving from a current state to any future state. Example: A branded packaged goods manufacturer can determine the period – to- period switching and staying rate for her brand and, if the probabilities are stable, the brand's ultimate brand share.

b.   *Queuing Model*: This model shows the waiting times and queuing lengths that can be expected in many system, given the arrival and service time and the number of service channel. Example: A supermarket can use the model to predict queue lengths at different times of the day given the number of services channels and service speed.

c.   *New- Product- Pretest Models*: This model involves estimating functional relations between buyer states of awareness, trial and repurchase based on consumer preference and action in a pretest situation of the marketing offer and campaign. Among the well known model are: ASSESOR, COMP, DEMON, NEWS and SPRINTERS.

D.   *Sales- Response Model*: this is a set of model that estimate functional relationship between one or more marketing variables such as sales force size, advertising expenditure sales promotion expendition and so forth and the resulting demand level.

3.   OPTIMIZATION ROUTINES

a.   *Differential calculus*: This technique allows finding the maximum or minimum value along a well behaved function.

b.   *Mathematical Programming*: This techniques allows finding the values that would optimize some object function that is subject to a set of constraints

c.   *Statistical decision Theory*: This technique allows determining the course of action that produces the maximum expected value.

d.   *Game Theory*: This technique allows determining the course of action that produces the maximum expected value.

e.   *Heuristics*: This involves using a set of rules of thumb that shorten the time or work required finding a reasonably good solution in a complex system.

TYPES OF DECISION MAKING PROCESS

Decision Making Under Certainty: Decision making is a resolution to adopt a course of action from available alternatives and it is an integral part in planning. Decision making under certainty

is a decision process in which the decision maker is faced with a state of nature in which he has complete information about the state of the nature and there are several course of action from which to make a choice alternative that is most likely to yield the designed goal.

Decision Making Under Uncertainties: decision making would be easy if we could predict reliably what outcome would follow from the selection of which alternative. To this end decision maker use forecast or predictions of the future, to guide their choice of alternative. They attempt to predict the outcome. On all values of interest to the decision maker associated with each alternative that might be chose. For example: the decision maker may use forecast of market size, market share, price and production cost in order to predict the profits associated with a new product. When the quantities forecasted are uncertain, forecaster can describe the uncertainty about these uncertainties using a probability distribution. A probability distribution is a mathematical form for capturing what we know about uncertainties and how confident we are of what we know. A probability distribution could record, for example, that the decision maker (or his designated expert) believes that there is a 30 percent chance of a product having less than 10 percent market share 2 years after its launch and a 60 percent chance of the product having less than a 30 percent market share.

After assigning probability distribution each uncertainty, one can examine the uncertainty associated with the outcomes of the decision situation. For example, given probability distribution for price, market share, market size, cost etc one can determine a probability distribution for profits.

Decision Making Under Uncertainty: This occurs when the decision maker cannot assign objective mathematical probabilities to the state of nature. The criteria used by the decision maker are subjective and sometime personal to the decision maker, that is, the decision maker under this situation is faced with a state of nature in which he is not certain about it or do not have knowledge about it. So he decided to make a probability of the situation.

Decision Making Under Risk: Here complete information about the state of nature is not available. The decision maker estimates the mathematical probabilities with which each one or more states of nature will occur. The decider can determine this from past experience and historical data.

Decision making under conditions of conflict and competition: Decision making under conditions of conflict and competition is found where opponents are in conflict of interest or contending for a share of a fixed market in such situation, opponents take into account the actions and problems of others. These types of decision is analysed as game theory.

CONCEPTS OF DECISION MAKING
A decision is a allocation of resources. It can be likened to writing a Cheque and delivering it to payee. It is irrevocable, except that a new decision may reverse it.In the same way Cheque is signed by the account owner, a decision maker is one who has authority over the resources being allocated. Presumably, he or she makes the decision in order to further some objective, which is what he hopes to achieve by allocating the resources.The decision maker will make decision's consistent

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with his values which are those things that are important to him especially those that are relevant to this decision. A common value is economic, according to which the decision maker will attempt to increase his wealth. Others might be personal, such as fairness. The decision maker might set a goal for his decision, which is a specific degree of satisfaction of a given objective, for example, the objective of the decision maker might be to make a million dollars

A decision maker might employ decision analysis, which is a structured way of thinking about how the action taken in the current decision would lead to a result. In doing this one distinguished three features of the situation.The decision to be made, the chance and unknown event, which can affect the result itself. Decision analysis then constructs models, logical and perhaps even mathematical representation of the relationships within and between, these three features of the decision situation. The models then allow the decision to estimate the possible implications of each course of action that he might take, so that he can better understand the relationship between his actions and his objectives.

The three features of a decision situation.
At the time of the decision, the decision maker has available to him at least two alternatives, which are the course of action that he might take. When he chooses an alternative and commits to it (i.e. signs and delivers the Cheque), he has made the decision and then uncertainties come into play. These are the uncontrollable elements that we sometime call luck. Different alternatives that the decision maker might choose might subject him to different uncertainties, but in every case the alternative combine with the uncertainties to produce the outcome. The outcome is the result of the decision situation and is measured on the scale of the decision maker's values since the outcome is the result, not only of the chosen alternative but also of the uncertainties. It is itself an uncertainty, for example an objective might be to increase wealth, but any alternative intended to lead to that outcome might lead instead to poverty.

COMPETITIVE EDGE / ADVANTAGE AND MARKETING STRATEGY

Today, understanding customers is crucial, but it's not enough under the marketing concept, companies gain competitive advantage by satisfying consumers need better than competitors do. And one of the means of achieving this is the use of marketing intelligence strategy. Thus, marketing strategies must consider not only the needs of consumers but also the strategies of the competitors. The first step competitor analysis, the process of identifying assessing and selecting key competitors. The second step is developing competitive marketing strategies that strongly position the company against the competitors and give it greatest possible competitive advantage. To plan affective competitive marketing strategies, the company needs to find out all it can about its must constantly compare its products, prices, channels and promotion with those of close competitor, all these achievable with the establishment of effective and efficient marketing intelligence system and marketing information system.With the effective use of marketing intelligence as a strategical tool, a company can avoid what is called competitor myopia. Companies must avoid "competitor myopia". A company is more likely to be "buried" by its latent competitors than its current ones. For instance, in it detergent business, Unilever has worried most about growing competitor from Procter and Gamble and other detergent manufacturers. But

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Unilever may face a much greater threat from research being done on an ultrasonic washing machine. If perfected, this machine would wash clothes in water with little or no detergent. What greater threat is there to the detergent business than detergent less washing?

Similarly, in 1997 Encyclopedia Britannica saw itself as competing with other publishers of printed encyclopedia sets selling for as much as $2,200 per set. However, it learned a hard lesson when Microsoft Encarta, an encyclopedia on CD- ROM, was introduced and sold for only $50. It seems that parents bought the Britannica less for its intellectual contact than out of a desire to do what's right for the children. Although less comprehensive than the Britannica, Encarta and other CD- ROM encyclopedia served this "do what's right" purpose well and Britannica sales plunged by more than 50 per cent between 1990 and 1997. This Encyclopedia Britannica's real competitor was the computer. This is a mistake avoidable through effective marketing intelligence. Having identified and evaluated the major competitors, the company must now design broad competitive marketing strategies by which it can gain competitive advantage by offering superior customer value. But what broad marketing strategy might the company use? Which ones are best for a particular company or for the company's different division and products?

No one strategy is beat for all companies. Each company must determine what makes the most sense given its position in the industry and its objectives, opportunity and resources. Even within a company, different strategies may be required for different business or products. For instance, Guinness uses one marketing strategy for its leading brands (like Guinness stout) in stable consumer markets, and a different marketing strategy for its products like Gordon Spark.

COMPETITIVE POSITIONS

Firms competing in a given target market, at any point in time, differ in their objectives and resources, other are strapped for funds. Some are old and established other new and fresh. Some strive for rapid market share growth, other for long term profits. The firms occupy different competitive position in the target market.For this research work, I examined the competitive strategies employed in brewing and beverages industry in which Guinness Nigeria belongs, based on the roles firms in this industry play in the target market that of lending, challenging, following or niching. Every industry contained a market leader is the firm in the industry with the largest market share. It usually leads other firms in price changes new product introduction, distribution coverage and promotion spending, for instance, in terms of product "stout" Guinness stout is the leading stout of all stouts produce in this industry.

It dictates the prices and other market activities. Following in this industry in terms of the product stout is legend by Nigeria Brewery. Market leaders, uses several defense strategies of maintain its position and prevent follower or challengers from talking over, such, defense, pre-empire defense, counter offensive, mobile defense and contraction defense. Market challenger is a runner –up firm in an industry that is fighting hard to increase its market share. In term of product "stout" the Nigeria Brewery is the strongest challenger in the industry and uses several attack strategies to ensure that its legend stout overtake Guinness stout, such attack strategies like Frontal attack, flank attack, encirclement attack, by pass attack, guerilla attack and other types of attack. Market follower is a runner up firm in the industry that wants to hold its share without rocking the boat

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while market nicher is a firm in an industry that serves small segments that other firms overlook or ignore.

CONCLUSION

In conclusion, many factors have increased the need for more and better information as companies becomes national and international in scope, they need more information on larger, more distant markets as income increase and buyers becomes more selective organisation need better information about how buyers respond to their different products and appeals. As organisation uses more competition, they need information on the effectiveness of their marketing strategic tools. Finally, in today's rapidly changing environment managers need up-to-date information to make timely decision. The research aimed at finding the impact of marketing intelligence systems on decision making as well as the relationship, if any that exists between the marketing strategy adopted and its marketing intelligence system. The literature review of this study gave full details of published and unpublished related and relevant case studies and literature. This shed light on concept of marketing intelligence system, marketing research, database marketing the increase for information use and benefit of marketing information, marketing decision support system as well as decision making process.

RECOMMENDATION

As aforementioned, finding enumerated from this study have show that there is a relationship between marketing information system and decision making process of an organization. It must be understood, that the cited case studies were conducted some years ago, especially in foreign countries, and this might be affected by changes. This particular problem leads to the question of whether the finding and theories are not so outdated especially in Nigeria. In view of this fact, this present research is timely and it is hoped that it will be very useful in management of information in any organization.My advice for any future research on this kind of study is tat investigations should not use only questionnaires as the researchers in this study have done, but should try to employ questionnaires interview method of collecting the data in order to have capture a broader views of the respondents and to take care of those lapses, that might have resulted from the single use of a questionnaires.Further empirical studies, the researcher could make use of a larger sample size. I also feel that the process involved in this study have exerted great pressure on the investigator in term of time lag and expenses incurred during this study. I would suggest that there should be nothing wrong, if thesis writing were allowed at the first semester of the fourth year of our B.Sc Program rather than the last session of the program.Finally, any other investigator who is interested in this area should put into consideration the nature of organizational structure that exists in the organization under consideration because it acts as part of the determinations of most organizations, especially in their marketing activities and decision.Also that marketing strategy adopted by7 the company under study as regards its product is as a result of the available marketing information collected the through the use of marketing information system.

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