#### MARKETING ENGINEERING

**Unit** – I: Marketing Engineering Approach, Key Concepts of Marketing Engineering (ME) Model, Verbal, Model, Box and Arrow Model, Response Model, Mathematical Model, Models Vs Judgments, Trial / Repeat Model, Marketing Decision Environment, Tools for Marketing Engineering , Business Value of Marketing Engineering, Customer Value, Value in Use Assessment, Economic Life Time Value, Approaches to Measure Customer Value.

**Unit – II**:Segmentation, Targeting, Positioning-Traditional Segmentation, Targeting, Positioning through Brand Linkages, Perceptual Maps, Preference Maps, Limitations of Perceptual and Preference Map Forecasting Methods – Judgmental Method, Market and Product Analysis Method, Time Series Methods, Causal Methods, Product Life Cycle, New Product Forecasting Models – The Bass Model Bases Model, Selection of Forecasting Methods.

**Unit – III:** Market Response Models: Concept of a Response Model, Response Models – Aggregate Response Model, Individual Response Models, Shared Expenditure Models, Qualitative Response Models.

**Unit** – **IV:** Strategic Market Analysis, Strategic Marketing, Decision Making, Advertising Budget Model, Rao & Miller Model, Ad budg model, the Full Model, Advisor Model, Media Decisions, Steps in Ad design Adcad systems, Syntex Approach.

**Unit** –V: Geo-demographic analysis, Gravity Model, Pricing Models, Differential Pricing, Competitive Bidding Bases for Differential Pricing, Revenue Management Process, Promotional analysis. Promotional Effects, Promotional types and targets, Promotional Effects Model.

#### **UNIT-I**

INTRODUCTION The tremendous development in information and communication, whether electronic or traditional, affects business the environment, which requires more and more research, analysis and accuracy in making marketing decisions. Marketing decisions obey and follow up engineering process and structure in design based on procedures of research, studies, gathering of data and information, and using statistical methods with modern technology in manipulating and processing these data and information targets . Simulation is also required to know the market and the way to deal with it and respond to its requirements and needs in order to enable marketing managers to design effective marketing plans that provide it with capabilities to achieve goals and organizational targets Marketing concept differs according to the stage or phase that it is passing through. Some people believe that traditional marketing represents an art; others see it as a science. As for specialists in marketing engineering, they merge the art and the science to solve certain problems. Engineering work is concerned with solving problems as well as modifying processes and procedures to enter new products or techniques or knowledge and new methods, and this represents a solution for problems, Solving it occurs through assigning engineers to be part of this change, by interacting and working with marketing engineering to enable this management to make marketing decisions and solve the problems that it faces by adopting developed techniques and technology and effective communication tools so that it becomes capable of working on enhancement of current products and providing new products with differentially competitive advantages. Good pricing, promotions distribution and other marketing activities are also needed to improve marketing decisions related how to communicate and approach the market. All can be done by developing scientific research concerning different marketing activities and by adopting marketing engineering The direction towards marketing engineering contributes in the transformation from traditional methods to the most modern techniques, statistical methods, software and depending on internet network and statistical programs in research, development, and meeting customers' desires and needs. It enables marketing managers to implement their activities with high efficiency because statistical programs help and assist in discovering multiple alternatives that enable marketing administrations to differentiate among them and take the appropriate decision by increasing awareness and improving good practices among employees and workers in the marketing department. Besides that, marketing engineering and their tools provide an analytical method to determine the best marketing strategies and assist in making marketing decisions.

MARKETING ENGINEERING CONCEPT: The marketing engineering term was introduced first by Lilien and Arvind in 1998, where they indicated that marketing engineering is formed by using decision forms and computer to take marketing decisions. In 2002, they indicated that marketing engineering represents an organized method to utilize and employ data and knowledge to drive effective marketing process to take decisions through decision-making processes supported by technology and model. Lilien et al. define marketing engineering as a systematic process of putting data and marketing knowledge into practical use through planning, designing and building assistant devices to take decisions, and the systems of marketing decisions support; and to adopt local communication network and computer network which contribute to enable individuals use personal computers and share in developing and adopting marketing engineering. The accelerating growth in the volume of data, information and the efforts to restructure or reengineer marketing engineering businesses require the following: - Efficiency in implementing marketing engineering - The comparison between offer and demand along with the properties of system design for marketing decisions support - The nature and features of an implementation process that depends widely on differences between end user systems and the developed systems of marketing decisions support system - Employees training on using programs and communication network The style and method that marketing engineering relies and depends on are restricted and available only to managers in large organizations who have a strong motive to adopt them in addition to huge budgets and computers connected to networks with programs that are easy to use in implementing and confirming marketing engineering methods. But the development of the communication process and the modern trends among employees, consumers and organizations to use the available communication tools like computers, network connection and mobiles play a role in increasing implementation efficiency of marketing engineering. For sure, it contributes in supporting marketing management to make and support marketing decisions in a way that it satisfies the best results when implementing these decisions on the practical side because marketing engineering is involved in following accelerated developments in the external and internal environment based on data analysis and its manipulation by statistical methods and by using statistical programs developed in this process, which contributed to gaining accurate information and took part in making the right decisions. The main job of marketing management depends on environmental analysis for the target of defining the factors of the external environment that affect an organization's business, achieving its goals and targets, and at the same time marketing management objectives and targets, which represent part of the organization's objectives. Also, marketing management usually works to identify the internal environment through available information by using records of organization and marketing department along with internal reports in order to determine and identify the weak and strong points of the organization. It will help much to describe the surrounding circumstances of the organization accurately and specifically and identify market directions by using market technology so that it will enable management to issue effective, efficient and successful marketing strategies [10]. From this, the role that marketing engineering plays becomes clear, as the process and operation through which information is put in a usable sequence by using analysis, computer and the proper statistical programs. As a matter of fact, there are four main reasons that make. marketing engineering the future of marketing: - Marketing is a technical job where marketers of today are using complicated technology, increasingly, to communicate with clients and customers. They must understand, for example, search engine logarithms and procedures, data analysis, marketing automation systems, popups' filters, and email marketing regulations, using applications of the programs, browsers and features of the browser across many - More experience is required when a marketing team develops marketing tools or mobile applications. - Marketing authorities can also run campaigns management through social media using supervising programs and fixed assets management tools, which focus on data ware houses identical to what management systems of engineering products and operations are doing currently - Major marketing supervisors can now spend easily on technology more than their colleagues in information technology or technology control. Digital marketing is the field that is the fastest in growing towards marketing expenditure and gaining talents in different fields

3 Technology and Marketing Engineering The foundation for marketing engineering success is the employment and use of technology, which is considered as the key to this success, especially in the current days. Marketing management receives tremendous volumes of data and information by adopting marketing information system which includes marketing researches, marketing intelligence, internal reports and work to process and manipulate data through marketing decisions support system. This system provides information about market directions, competitors, consumption attitudes for targeted markets, indicators for awareness, experience and predictions of sales, demand estimation, how far the effectiveness of the marketing mix is. It also follows variations in the external environment. All these made marketing management face huge volumes of data that require the use of modern technology to gain and gather data and information, then process and analyze them to reach positive results when used properly. For that, marketing engineering locates data and information in a usable sequence for the sake of reaching effective and successful marketing decisions [19]. The concept of technology, as stated by Alsamydai and Rudaina. expresses the real potentials to implement scientific knowledge for practical purposes. It includes the usage of methods, systems and devices that are produced from scientific knowledge used for practical purposes that lead to accumulated knowledge, experience, creation and invention for the sake of providing more developed techniques than the previous period, and these techniques are a result of technology. The technique for that represents a method to accomplish business through the use of developed devices, programs, software, and communication tools as well as reliance on mathematical or statistical equation to process and analyze data. Sultan and Christian. indicated that adoption of communications and information technology by organizations and marketing management was of positive effect on marketing strategy, selection of targeted sectors, market.

MARKETING ENGINEERING AS ASSISTANT TOOL IN MAKING MARKETING DECISIONS Adopting marketing engineering has contributed to the increasing role and efficiency of marketing management decisions support systems effectively. It has assisted marketing managers to be more effective in making decisions concerning marketing mixture factors, especially in the electronic marketing field. Marketing engineering became a companion associated with the fast and enormous development in information technology and provided, to marketing managers, an enormous volume of data that enabled them to process, manipulate and transform data to information used as support and stanchion in making marketing decisions. Marketing information system focuses on manipulating and processing this data by using programming technology, statistical programs (like SPSS), proper statistical methods (like

correlation coefficient, simple linear regression, multiple regression, produce T-Test value) and other models that match the objective nature of data processing to provide marketing management with information, knowledge and experience according to the adoption of marketing engineering concept. The capability of marketing management to make successful decisions depends on the level of success of the marketing information system, the development in information technology, model methodology, marketing knowledge, marketing through the internet and the reliance on electronic companies' sites and social media sites [45]. All these have led to an advanced and important position in marketing management support systems and the marketing decisions in the organization structure of the marketing department. As a matter of fact, the practical situation for this management (administration) is the marketing decisions support system, which is considered as a part of marketing information system that includes marketing research, marketing intelligence and internal reports. Marketing decision support systems play the major role in making marketing decisions because they concentrate on data collection and process data by depending on methods developed in the analysis. These methods identify the effective factors in making marketing decisions including internal and external factors that contributed to push and drive marketing management to reengineer marketing activities and adopt the marketing engineering concept to be capable of adjusting with the marketing environment and making the right decisions [43]. Workers in the field of marketing engineering are aware of the important role that marketing engineering plays in achieving organizational objectives by recognizing the nature of products desired by consumers and also the nature of products that are provided by competitors.

Five Decades of Marketing Decision Models We will give a sketch of the developments in marketing decision models by formulating per decade the most prominent approaches, together with examples of these approaches. The overview is summarized in Table 1.1. By necessity, such a characterization has a subjective element, but we trust that the overall picture is reasonably valid. Below we briefly discuss the five decades.

The Sixties: The Beginning The first mathematical approaches to marketing problems can be found in the micro-economics literature. Of the key references given in Table 1.1, perhaps the Dorfman and Steiner paper (1954), with their theorem for marketing mix optimization, is the most famous one. Later in the sixties, the application of OR techniques to marketing problems became in vogue. Optimization methods (for example linear programming and goal programming), Markov models, simulation techniques, and game theory were applied to marketing problems The Seventies: The Golden Decade of Marketing Models If there has ever been a "Golden Decade" for marketing decision models, these were the seventies of the previous century. In this decade, the field of marketing models grew exponentially and, what is perhaps more important, developed an identity of its own. The modeling of marketing phenomena and marketing problems became interesting in itself, irrespective of whether or not they could be solved with a known OR technique. In the sixties it was often a matter of a technique seeking for a task, whereas now the marketing problems as such became the point of

departure. Researchers started to realize that OR algorithms can be too much of a straightjacket for real world marketing problems. Sometimes marketing problems had to be "mutilated" in order to fit them to an existing OR technique (Montgomery and Weinberg 1973). The most conspicuous example is the application of linear programming to media planning (Engel and Warshaw 1964). Media-planning problems are not really linear, but were forced to be so, in order to solve them with linear programming. The development of marketing models as an independent field from OR has continued since then. Although this very Handbook of Marketing Decision Models is published in the "Series in Operations Research and Management Science", one glance through its content makes immediately clear that the overlap with OR/MS is limited. The Eighties: Marketing Generalizations and Marketing Knowledge By the eighties the work on marketing response models had produced a sufficiently large number of empirical studies in order to make generalizations. This gave rise to meta-analyses for several marketing instruments. Often-cited studies are the meta-analyses for advertising (Asmus et al. 1984) and for price (Tellis 1988). This work had a follow-up in the nineties with the Special Issue of Marketing Science on Empirical Generalizations in Marketing (Bass and Wind 1995). Generalizations have the purpose of summarizing what we know about a particular subject or area. In the second half of the eighties, marketing knowledge as such became a popular topic. Using techniques from the fields of artificial intelligence (AI) and computer science, it became possible to "store" marketing knowledge in computers and make it available for decision making. This gave rise to the development of knowledge-based systems and expert systems. In marketing most of these systems were developed for advertising and sales promotions. As a separate development, in this decade, conjoint analysis models became quite prominent. Interestingly conjoint analysis models the decision making of individuals (customers for example), but its results can be used as input for marketing decision makers, for example for the design of new products. Conjoint analysis has its roots in psychology. The first work on conjoint analysis in marketing appeared in the seventies (Green and Srinivasan 1978) and it has remained a very important area until today.

The Nineties: The Marketing Information Revolution The nineties is the decade in which (pointof-purchase) scanner data became available on a large scale. This "marketing information revolution" (Blattberg et al. 1994) was a major stimulating factor behind a surge in consumer choice modeling, especially in the area of sales promotions. Multinomial logit models (Guadagni and Little 1983) were used as the most prominent tool to carry out these analyses. The topics that were studied included the construction of baseline sales levels, the effects of different sales promotion instruments on sales, the effects of heterogeneity in the consumer population and the decomposition of the sales promotion "bump" into components, such as brand switching, purchase time acceleration, and stockpiling (Gupta 1988). The quickly growing amounts of data also made it possible to employ new techniques from artificial intelligence and computer science: inductive techniques (e.g., artificial neural nets) that can find regularities in large data bases, and in this way "extract" knowledge from data. These methods, often referred to as "data mining", started to emerge in marketing in the nineties, and with the ever growing power of computers and the ever larger size of databases, they can be expected to become even more important in the future

The First Decade of the New Millennium: Individual Customer Models The most important development of the recent years is that the individual customer has become the unit of analysis. Enabled by the increased capacity of information technology, companies have set up (often huge) databases with records of individual customers. Mostly, these databases are part of Customer Relationship Management (CRM) systems. This customer-centric approach has given rise to new species of marketing models (CRM models), for example models for the acquisition and retention of customers, models for predicting.

Consumer Decision Making Models Although traditionally marketing models have been more focused on managerial decision making than on consumer decision making, consumer decisions are the most important inputs to any marketing decision. Therefore, the Handbook starts with models for consumer decision making.

Marketing Mix Models As we have seen, the work on marketing instruments started in the seventies, and this remained a core area of marketing models ever since. In the chapters of this section, new development are presented in the areas of advertising, sales promotions, sales management and competition.

Customer-Centric Marketing Models The chapters in this section deal with completely new types of models. These models were developed as a consequence of the focus on individual customers which is increasingly common in today's marketing. We have discussed this earlier as the defining characteristic of marketing models in the current decade.

Special Model Approaches In this section the Handbook deals with modeling approaches that have not been specifically developed for marketing, but that have great potential for this field.

# UNIT-II

### Segmentation and Targeting

- $\succ$  Basics
- Market Definition
- Segmentation Research and Methods
- Behavior-Based Segmentation
  - Market Segmentation
- Market segmentation is the subdividing of a market into distinct subsets of customers.

### Segments

• Members are different between segments but similar within.

Segmentation Marketing

### Definition

Differentiating your product and marketing efforts to meet the needs of different segments, that is, applying the marketing concept to market segmentation.

### **Primary Characteristics of Segments**

• *Bases*—characteristics that tell us why segments differ (e.g. needs, preferences, decision processes).

Media habits

- *Descriptors*—characteristics that help us find and reach segments.
  - (Business markets)(Consumer markets)IndustryAge/IncomeSizeEducationLocationProfessionOrganizationalLife styles

A Two-Stage Approach in Business Markets

structure

# Macro-Segments:

- First stage/rough cut
  - Industry/application
  - Firm size

### **Micro-Segments:**

- Second-stage/fine cut
  - Different customer needs, wants, values *within* macro-segment
  - Overview of Methods for STP
- Clustering and discriminant analysis
- Choice-based segmentation

- Perceptual mapping
  - later

Segmentation (for Carpet Fibers)

A Note on Positioning

Positioning involves designing an offering so that the target segment members perceive it in a distinct and valued way relative to competitors.

Three ways to position an offering:

- 1. Unique("Only product/service with XXX")
- 2. Difference ("More than twice the [feature] vs. [competitor]")
- 3. Similarities ("Same functionality as [competitor]; lower price")

What are you telling your targeted segments?

Behavior-Based Segmentation

• Traditional segmentation

(eg, demographic, psychographic)

- Needs-based segmentation
- Behavior-based segmentation

(choice models)

Steps in a Segmentation Study

- Articulate a strategic rationale for segmentation (ie, why are we segmenting this market?).
- Select a set of needs-based segmentation variables most useful for achieving the strategic goals.
- Select a cluster analysis procedure for aggregating (or disaggregating customers) into segments.
- Group customers into a defined number of different segments.

• Choose the segments that will best serve the firm's strategy, given its capabilities and the likely reactions of competitors.

Segmentation: Methods Overview

- Factor analysis (to reduce data before cluster analysis).
- Cluster analysis to form segments.
- Discriminant analysis to describe segments.

Cluster Analysis for Segmenting Markets

- Define a measure to assess the similarity of customers on the basis of their needs.
- Group customers with similar needs. Recommend: the "Ward's minimum variance criterion" and, as an option, the K-Means algorithm for doing this.
- Select the number of segments using numeric and strategic criteria, and your judgment.
- Profile the needs of the selected segments (e.g., using cluster means).
- Select the appropriate number of clusters:
  - Are the bases variables highly correlated? (Should we reduce the data through factor analysis before clustering?)
  - Are the clusters separated well from each other?
  - Should we combine or separate the clusters?
  - Can you come up with descriptive names for each cluster (eg, professionals, techno-savvy, etc.)?
- Segment the market independently of your ability to reach the segments (i.e., separately evaluate segmentation and discriminant analysis results).

#### Cluster Analysis Issues

- Distance definition
  - Weighted Euclidean distance often works well, if weights are chosen intelligently
- Cluster shape
  - Shape of clusters found is determined by method, so choose method appropriately

- Hierarchical methods usually take more computation time than *k*-means
- However multiple runs are more important for *k*-means, since it can be badly affected by local minima
- Adjusting for response styles can also be worthwhile
  - Some people give more positive responses overall than others
  - Clusters may simply reflect these response styles unless this is adjusted for, e.g. by standardising responses across attributes for each respondent.

# UNIT-III

### **Market Response Model**

Marketing Inputs:

- Selling effort
- advertising spending
- promotional spending

Marketing Outputs:

- sales
- share
- profit
- awareness

Give phenomena for a good model:

- P1: Dynamic sales response involves a sales **growth rate** and a sales **decay rate** that are different
- P2: Steady-state response can be **concave or S-shaped**. Positive sales at 0 adverting.
- P3: Competitive effects
- P4: Advertising effectiveness dynamics due to changes in media, copy, and other factors.
- P5: Sales still increase or fall off even as advertising is held constant.

Saunder (1987) phenomena

- P1: Output = 0 when Input = 0
- P2: The relationship between input and output is linear
- P3: Returns decrease as the scale of input increases (i.e., additional unit of input gives less output)

- P4: Output cannot exceed some level (i.e., saturation)
- P5: Returns increase as scale of input increases (i.e., additional unit of input gives more output)
- P6: Returns first increase and then decrease as input increases (i.e., S-shaped return)
- P7: Input must exceed some level before it produces any output (i.e., threshold)
- P8: Beyond some level of input, output declines (i.e., supersaturation point)

Aggregate Response Models

- Carry-over effect: current marketing expenditure influences future sales
- Advertising adstock/ advertising carry-over is the same thing: lagged effect of advertising on sales
- Delayed-response effect: delays between when marketing investments and their impact
- Customer holdout effects
- Hysteresis effect
- New trier and wear-out effect
- Stocking effect

Simple Decay-effect model:

Response Models can be characterized by:

- 1. The number of marketing variables
- 2. whether they include competition or not
- 3. the nature of the relationship between the input variables
- 1. Linear vs. S-shape
- 4. whether the situation is static vs. dynamic
- 5. whether the models reflect individual or aggregate response
- 6. the level of demand analyzed
- 1. sales vs. market share

Market Share Model and Competitive Effects:  $Y=M\times V$ 

- Y = Brand sales models
- V = product class sales models
- M = market-share models

Market share (attraction) models

Individual Response Model:

Multinomial logit model representing the probability of individual i choosing brand l is

# **Conjoint Analysis and Augmented Conjoint Analysis**

More technical on 27.1

Jedidi and Zhang (2002)

- Augmenting Conjoint Analysis to Estimate Consumer Reservation Price
- Using conjoint analysis (coefficients) to derive at consumers' reservation prices for a product in a category.
- Can be applied in the context of
- product introduction
- calculating customer switching effect
- the cannibalization effect
- the market expansion effect
  - Netzer and Srinivasan (2011)
- Break conjoint analysis down to a sequence of constant-sum paired comparison questions.
- Can also calculate the standard errors for each attribute importance.
- Individual Response Models, Shared Expenditure Models, Qualitative Response Models.

### What Is Strategic Market Analysis?

Here at PESTLE Analysis, we discuss a variety of topics related to business analysis, but we've never introduced you to the concept of strategic market analysis. So what is strategic market analysis, and why should you care?

Although strategic market analysis has no dictionary definition, it can be understood as any market analysis which pertains to an individual business strategy or to business strategy as a whole. The goal of strategic market analysis is to help enterprises of all sizes make educated business decisions, especially as related to strategy.

### Contents

- Understanding Strategic Market Analysis
- Approaches to Strategic Market Analysis
  - SWOT Analysis
  - PEST Analysis
  - Porter's Five Forces Analysis
- Pros and Cons of Strategic Market Analysis
  - Upsides to Strategic Market Analysis
  - o Downsides to Strategic Market Analysis
- How to Conduct Strategic Market Analysis
- Final Thoughts
  - Understanding Strategic Market Analysis

As we touched on above, strategic market analysis isn't a fully developed (or defined) concept. Instead, to understand strategic market analysis, you need to take each word at face value. That's why we say that strategic market analysis is any *market analysis* which pertains to business *strategy*. There's definitely some ambiguity here, which is mostly caused by the ambiguity of the word "strategy."

For some, strategy refers to an individual plan or set of steps that an organization is executing to achieve a specific goal. For others, strategy refers to an organization's overarching approach to business, especially as related to business development and growth. Both of these are valid definitions.

In this guide, we'll look at strategic market analysis as it related to all the different levels of strategy. Now, let's kick things off with the different approaches to strategic market analysis.

Approaches to Strategic Market Analysis

To find strategic market analysis tools, you can look at the wider category of market analysis tools on our website, and rule out the ones which don't refer to business strategy. Some of the most popular tools and approaches to strategic market analysis, then, include:

### SWOT Analysis

SWOT analysis is a market analysis tool that takes into account the Strengths, Weaknesses, Opportunities, and Threats facing a business. This information can be used to mold a business's overarching strategy. However, you could also apply SWOT analysis to an individual business venture, which would help analyze the strategy for that single venture.

### **PEST** Analysis

PEST analysis is another incredibly popular market analysis tool. This time, you look at the Political, Economic, Social, and Technological factors affecting a given market or industry. Since PEST analysis focuses on entire markets, it's better for shaping an overall business strategy than analyzing individual decisions.

### Porter's Five Forces Analysis

Porter's Five Forces analysis is a significantly less frequent market analysis tool, but it's still equally valid. It accounts for five factors — the five forces:

- Supplying power
- Buying power
- Competition
- Threat of substitution
- Threat of new entry

Like SWOT analysis, Porter's Five Forces analysis is as useful for strategic market analysis as for any other type of analysis. This is because it can be applied on the macro and micro scales, to overall business strategies and to individual business decisions.

There are plenty of other tools for strategic market analysis, and you can find many of them just by looking around our website!

Pros and Cons of Strategic Market Analysis

If used correctly, strategic market analysis can be an extremely powerful tool in the world of business. In this section, we'll go over the pros and cons of conducting this type of analysis.

### Upsides to Strategic Market Analysis

### • Make more money

Ultimately, business strategy comes down to maximizing profits. Strategic market analysis can be a fantastic way for your organization to make more money, since it will help uncover otherwise-hidden business opportunities.

# • Conquer competition

Strategic market analysis will help you identify your competition before it's too late. Also, it will open your eyes to the avenues you can then use to overcome that competition — for example, untapped revenue streams.

### • Avoid bad decisions

One of the most important benefits of strategic market analysis is the identification and subsequent avoidance of bad business decisions. Every idea is a good idea in principle, but when you start researching and analyzing the strategy and its relevant market, you may quickly see how the plan will fall through.

Downsides to Strategic Market Analysis

### • Time taken

As with any strategic planning or market analysis, strategic market analysis takes a lot of time. This is because proper market analysis takes into account a wide variety of factors, which don't always have data surrounding them.

### • Bad results

In rare cases, strategic market analysis may lead you to making false conclusions. If this is the case, it may cause you to miss out on otherwise-profitable business ventures.

### How to Conduct Strategic Market Analysis

If you've decided that strategic market analysis would be a good choice for your organization, you might be wondering how to get started with conducting your first market analysis. There's no exact formula, but here's what we'd suggest you do to get going:

### • Choose the market analysis tools for you.

The first thing you can do to get started with strategic market analysis is select your tools. As we mentioned earlier, there are a whole host of market analysis tools on our website. Take a look through and choose the ones that look most applicable to your organization — but definitely start by looking at PEST, SWOT, and Porter's Five Forces analysis to see whether they'll give you the information you need.

# • Gather data from a variety of sources.

To conduct any market analysis, you're going to need plenty of data. We go into plenty of depth on what kind of data you'll need in this post, but we suggest you search for market reports of your industry and see what information you can find.

# • Conduct your market analysis!

With your data in hand, you can start working through the market analysis tools you've chosen. At the end, you'll want to draw conclusions from each tool, and see what kind of overarching decisions you can make regarding your organization's business strategy.

# Final Thoughts

Strategic market analysis isn't a concept that's been extensively discussed, but it's any market analysis relating to the overall strategy of your organization, or even the individual decisions you make within that organization. It's got plenty of benefits, and we definitely suggest you try it out!

# **Advertising Budget Determination**

# **Marketing dictionary**

# **Advertising Budget Determination**

decisions pertaining to the amount to be allocated to advertising expenditure in a given period; common approaches to advertising budget determination include arbitrary allocation, percent of sales, competitive parity, objective and task and budgeting models.

Unit –V

Price is a major parameter that affects company revenue significantly. This is why this paper starts by presenting basic pricing concepts. Strategies, such as market segmentation, discount, revenue management, price skimming, are introduced. A particular attention is paid to the relationship among margin, price and selling level. Then, the impact of prices on selling volume is analyzed, and the notion of selling curve is introduced. Related pricing methods are discussed such as price testing, cost-plus method, involvement of experts, market analysis and customer surveying. Included in the last category is the conjoint measurement concerned with finding what parameters of the items are important to customers. The profile method and a simplified version, the two-factor method, are also detailed. They provide a set of part-worths (i.e., numerical values) for each tester. In other words, the opinion of each tester can be represented by a point in a space whose dimension is the number of part-worths. By applying a clustering method, specifically K-mean analysis, a limited number of clusters can be obtained, each of them representing a market segment. A deterministic pricing model with time-dated items is also analyzed. This model provides practical insights into pricing mechanisms.

Introduction Nigeria evolved from a relatively buoyant agricultural economy, with its major exports in the pre-1960s to early 1970s being non-oil agricultural produce, into a relatively rich, oildominated economy. Over the years, the proportion of crude oil exports in total exports had increased remarkably to become the dominant export commodity. The collapse of world oil prices and the sharp decline in the country's oil output resulting from a lowering of the country's OPEC quota in the early 1980s and the worsening economic and financial conditions that followed prompted the government to introduce the Structural Adjustment Programme (SAP) in July, 1986. SAPaimed to, among others, restructure and diversify the productive base of the economy so as to reduce dependency on the oil sector. Notwithstanding, crude oil exports continue to remain the dominant commodity that drives the economic fortune of the economy. Accordingly, the directional flow of Nigeria's exports showed that prior to the 1970s, the United Kingdom (UK) was the main importer of Nigeria's agricultural produce-dominated commodity exports. With the commercial exploitation of crude oil that became the major export commodity, the Americas, led by the United States (US) was the major importer of Nigeria's crude oil followed by Western Europe, with France, Germany, Netherlands and Italy as leading importers. However, the share of Africa in Nigeria's trade remained significantly very low and unstable due to the noncomplementarities of goods (Mordi, et al. 2010), and among ECOWAS countries as well (Chete and Adewuyi, 2012). Meanwhile, the recent past downturn in the industrialized countries have created uncertainty about the oil export markets in those economies. In the wake of increasing bilateral and multilateral arrangements globally and the bid to increase exports to compensate for the likely fall in the demand for oil from the industrialized economies, Nigeria entered into various forms of trade negotiations at the bilateral level. For instance, Nigeria has concluded trade agreements with many countries, including South Africa, Cuba, Vietnam, Tunisia, United States, Egypt, Algeria, Niger and Iran (Ukaoha, Ijemba and Ukpe, 2012). The major aims of these agreements is the promotion of trade, socioeconomic and cultural relations among the bilateral and multilateral groupings. Against this backdrop, this paper examines the

determinants of Nigeria's bilateral trade flows to some of its major trading partners by adopting the gravity model approach for the period 1999 to 2012. The major trading partners considered include: 9 European Union (EU) member countries, 5 countries that formed the BRICS and 3 other industrialized countries; the United States, Canada and Japan. Evidence shows that about75 percent of Nigeria's exports and 65 percent of its imports are directed to/from these countries in 2012. The paper utilizes the static fixed and the dynamic (GMM-system) random effects panel data approach for the estimation of the model. The rest of the paper is organized into four sections. Following this section is section two which reviews empirical studies and theoretical issues on the gravity trade model and presents stylized facts on the direction of Nigeria's exports and some key external sector indicators. Section three describes the research methodology, measurement of variables and sources of data used. Results presentation and discussion.

Specification of Empirical Model On the basis of the above theoretical and empirical views, the empirical model of this paper is specified as follows:  $\ln x_{ijt} = 0 + 1 \ln y_{it} + 2 \ln y_{it} + 3 \ln p_{it} + 4$ ln pjt + 5 ln rfeijt + 6 ln simijt + 7 ln popjt + 8 ln dijt + a9 ln dum1euijt + 10 lndum2bricsijt + 11 dum3lanijt + ijt (3) From equation (3) above, (i) and (j) denote exporter – Nigeria, and importer country, that is, a total of 17 countries - Belgium, Brazil, Canada, China, France, Germany, India, Italy, Japan, Netherlands, Portugal, Russia, South Africa, Spain, Sweden, United Kingdom and United States while t denotes time. Exports data were sourced from IMF's Direction of Trade Statistics (DOTS). Other variables are explained as follows: Market size variable yi, for country Nigeria, which is the source of exports, and yi importer, which is the destination country is measured as respective country's real gross domestic product (GDP). Data was obtained from the International Financial Statistics (IFS). International crude oil price and producer price index and were used as measures of relative prices for local (i) and destination (j) countries; RFE indicates relative factor endowment, and SIM3 stands for similarity index. The later two variables can be defined as follows: RFEij,t = | InPGDPi, t – InPGDPj, t | (4) 3 Breuss and Egger (1999), Egger (2000 and 2002), and Serlenga and Shin (2007) define SIM as in equation (5) above.  $\ln(\text{GDPi}) \ln(\text{GDPj}) \ln(\text{GDPi} + \text{GDPj}) \ln(\text{GDPi} + \text{GDPj}) 2 2 \text{ SIMij,t} = \ln 1 - (5)$