
3 Market Analysis

3.1 INTRODUCTION

Market is a group of potential customers who are likely to buy products or services offered by an organization. Characteristic of a market is the act of exchange. Some people (consumers) acquire the products they need most, and other people (suppliers), who are capable of satisfying the need, provide these to the former. Thus, both sets of people feel satisfied by this exchange. Typically, both these sets of people like to maximize their own gains.

Market analysis provides ideas about the likely market demand of such products or services, their competitiveness, locations, etc. It encompasses the current as well as future scenario. Its objective is to analyze the potential market size and its value. It also provides an insight about how the products or services compare with those offered by the competitors in quality, price and availability.

3.2 MARKET ENVIRONMENT

The fast-changing technological development during the later part of the 20th century has changed the market trends throughout the world beyond recognition. Consequently, all organizations have to continuously review and monitor the scenarios that are prevailing outside as well as inside the organization to ensure that it adapts to the changing market scenarios. These scenarios are collectively known as market environment in business parlance.

Market environment consists of two categories. The first is external category, which is outside the direct control of the organization and is generally termed 'macro-environment'. The second category is termed 'microenvironment' and relates more to the specific segment of the industry, and the concerned organization has a certain degree of control over it. Although these two categories are generally specific and independent, they do have occasionally some influence over each other.

3.2.1 MACRO-ENVIRONMENT

Macro-environment of a market comprises the certain distinct and identifiable external factors that influence the prevailing market trends. These are often collectively known by the acronym PESTLE, which stands for the following factors:

- Political;
- Economic;
- Social;
- Technological;
- Legal;
- Environmental.

The salient features of these factors are briefly discussed in the following paragraphs.

3.2.1.1 Political Factors

Governmental plans, policies, legislation, etc. generally affect the market (customers) as well as the organizations. Consequently, the organizations need to consider the political risks arising out of national as well as international political issues. Otherwise, the business of the organization may be affected in both the short and long terms. Political instability may create economic instability and social unrest, leading to a reduction in production and in export of raw materials, as well as a decrease in the population's purchasing capacity. Additional concern is that political risks vary from time to time.

3.2.1.2 Economic Factors

Economic factors such as unemployment, taxation and interest rates. affect individuals and organizations alike. Given the current globalized economic scenario, the economic factor affects the working of the organizations not only within the boundaries of the country or region, but elsewhere also. Thus, companies with operations beyond their own boundaries should be aware of the risks involved in operations in the environments of different countries. These risks include terrorism, civil unrest, civil revolution and strikes. Also, under such circumstances, the local government may even confiscate the assets of a foreign organization without paying adequate compensation. Disproportionate income distribution and poverty are other economic factors that need serious consideration. A large proportion of the world's population is below poverty line. It does not have enough food every day and also does not have the opportunity to receive even primary education.

3.2.1.3 Social Factors

Macro-environment presents challenges to organizations in the social and cultural fronts also. Social factors such as income, occupation and sex affect the customer's demands. Culturally, language, values, beliefs, etc. can also influence these demands.

3.2.1.4 Technological Factors

Technological innovations can open up exciting new markets and opportunities. Currently, technology is perhaps the most dramatic force in our society, which is shaping our destiny. Computer systems and internet are increasingly being used in universities, public and private sector organizations. As a result, when computer or internet systems temporarily fail to operate (may be due to viruses), there is usually serious personal as well as financial impact. A chain of organizations and individuals may be affected by such failures. On the other hand, several organizations in several countries are carrying out researches on new medicines, new industrial materials, robotic technologies, etc., which may revolutionize several areas of product development.

3.2.1.5 Legal Factors

A combination of political and judicial influences often leads to legal actions, such as imposition of sanctions and embargoes or controlling of sale. For example, many governments around the world have introduced regulations for controlling the sale and advertisement of tobacco products.

3.2.1.6 Environmental Factors

Concern about air and water pollution has grown steadily over the last few decades in almost every country around the world. In fact, there is a threat of shortage of drinking water in many countries in the foreseeable future. Also, the potential threat of global warming coupled with severe weather patterns is likely to have a damaging effect on the community, their homes and livelihood. These environmental hazards are likely to affect the market environment.

3.2.2 MICRO-ENVIRONMENT

Micro-environment consists of internal factors that focus on local issues, and can influence the organization's ability to meet the customer's needs. The main factors under this category are as follows:

- Employees;
- Suppliers;
- Local community;
- Customers;
- Intermediaries;
- Competitors.

3.2.2.1 Employees

Employees are the backbone of any organization and fountainhead of new ideas and knowledge. It is the people within it who drive it forward. Management and shareholders need to value the worth of this workforce in order to maintain a competitive position in today's dynamic market environment.

3.2.2.2 Suppliers

Dependable suppliers are vital for the successful operation of any organization. They furnish the resources required by the organization to produce its goods and/or services. It is therefore important to have a good working relationship between the organization and its suppliers. In this context, it should be borne in mind that the competitors may also be served by the same suppliers. Such suppliers should be dealt with diplomatically.

3.2.2.3 Local Community

This group includes neighborhood residents and community organizations who have some vested interest in the activities of the organization. It could be the residents of the locality, the media (newspapers, magazines, television and internet) or even the employees.

3.2.2.4 Customers

Customers are the most important actors in the organization's micro-environment. Without them, there would be no business. Thus, every organization must know its customers, where they come from, and what are their preferences, habits and attitudes. As they change, the organization must also change its strategy to continue to

be in line with their preferences, habits and attitudes. Otherwise, the organization is bound to lose the customer.

Broadly, customer market may be categorized under five heads:

1. *Consumer market*: individuals and households who buy products and/or services for personal use.
2. *Business customer market*: organizations who buy goods/services as inputs for their own production for further processing and selling.
3. *Reseller market*: individuals and organizations who buy goods/services for selling these at a profit.
4. *Government markets* buy goods and services to produce public services or to transfer the same to other agencies.
5. *International markets* include all the above buyers situated in other countries.

3.2.2.5 Intermediaries

Intermediaries are the individuals or organizations that operate between the component- or service-suppliers, the manufacturers and retailers. There may be several intermediaries in a supply chain, and they play an important role in the chain. It is important for the organization to maintain good relationship with the intermediaries in order to ensure the smooth flow of components or services; otherwise, interruptions in the flow might affect the production process.

Intermediaries could be product distribution firms, marketing services agencies or financial organizations. Product distribution firms help the product to move through the channel so that it becomes available to the appropriate customer. These include wholesalers, retailers, agents and franchisers. Marketing research, advertising, etc. are done by the marketing services agencies. Financial intermediaries help the organization in financial transactions. These include banks, credit companies and insurance companies.

3.2.2.6 Competitors

In order to sustain in any industry, all organizations need to be competitive. They have to score a strategic advantage by positioning their products ahead of those of their competitors in the minds of their customers. If they do not, the customers will go to their competitors. However, the winning strategies for large organizations and small units may not often be similar.

3.3 MARKET ANALYSIS PROCESS

Market analysis process is a systematic method for collection of data, their in-depth study and interpretation for deciding on marketing strategies. The intensity and frequency of the study vary as per the requirement of individual projects. The exercise provides varied information to the stakeholders and assists them in appropriately evaluating the market behavior. The process comprises in-depth study primarily of the following aspects:

- Demand pattern, i.e., the potential size and composition of the market;
- Current and future demand;

- Product specification and quality as compared with those of the competitors;
- Degree of competition;
- Marketing strategy of the organization;
- Tariff level.

The relevant data for the foregoing aspects can be gathered in two ways, viz., through a market survey for the specific project (for primary data) or through existing reports and publications collected for other projects (for secondary data). The former, i.e., survey for primary data collection, is generally reliable since the data are collected to meet a specific objective.

3.3.1 MARKET SURVEY FOR PRIMARY DATA

Market survey provides information which may be used for the examination of different aspects of market. These include the following:

- Current demand and future prospect;
- Demands in respect of different segments of the market;
- Price variations and market sustainability;
- Purchase policy;
- Customer perspective;
- Product varieties;
- Distributive trade practices.

Although market survey has many advantages, its results can be impaired by a number of shortcomings in the system. These include the following:

- The samples may not be actual representative of the market;
- The questionnaire may not be adequate;
- The respondents may not be able to understand clearly the questionnaire;
- Consciously wrong answers by the respondents;
- Distortion of responses by survey staff;
- Inadequate analysis and interpretation of the data.

Market survey may be done through a census survey or a sample survey.

3.3.1.1 Census Survey

In census survey, *all* users of a particular product or service are covered (as, for example, all industries using a particular type of machine or all readers of a particular magazine). This survey, though very useful, often becomes prohibitively expensive. As a result, it is used primarily by large and important establishments like steel plants and defense establishments.

3.3.1.2 Sample Survey

In sample survey, only a sample (portion) of the users are contacted, and relevant information is gathered and examined. The result of the study is then extrapolated to a target population. A sample survey generally covers the following stages.

3.3.1.2.1 Define the Target Community

The target community should be defined clearly without any ambiguity. The target community should also be categorized into segments based on typical characteristics, such as income brackets and professions.

3.3.1.2.2 Select the Sampling Scheme

Selection of the sampling scheme is to be done from a few alternatives such as random sampling, cluster sampling, sequential sampling and systematic sampling. The reliability of the survey is directly related to the sample size; the larger the sample size, the more dependable would be the survey result.

3.3.1.2.3 Develop the Questionnaire

The questionnaire constitutes the primary instrument for bringing out the required information about the product or service. It should aim at an in-depth understanding of the product or service as well as of the various technical and specialized issues. Preparation of the questionnaire needs a thorough understanding of the product or service and its usage as well as attitude and motivation of the community. The questionnaire should be clear as well as thorough. It is general practice to try out the questionnaire in a pilot survey and modify the same in light of the problems faced.

3.3.1.2.4 Recruit and Train the Survey Personnel

Recruiting and right kind of training of survey personnel are time-consuming activities. It is imperative that competent survey workers with appropriate technical culture are recruited for this purpose.

3.3.1.2.5 Obtain Response of the Questionnaire

The respondents are to be interviewed either personally or by telephone or through internet. In developing countries, the first option is mostly adopted.

3.3.1.2.6 Study the Responses

The responses should be thoroughly studied, and irrelevant and/or unwanted responses should be eliminated. The remaining responses should be shortlisted for in-depth analysis.

3.3.1.2.7 Analyze and Interpret the Responses

The information gathered by the survey should then be analyzed and interpreted carefully. Suitable statistical method may be employed for this purpose, if deemed necessary.

3.3.2 EXISTING REPORTS AND PUBLICATIONS (SECONDARY DATA)

Information gathered from already available reports and publications of earlier projects is generally utilized as secondary database and plays a very important role during the initial stages of market analysis of projects. This exercise is generally started by utilizing the internet where a vast range of information is available online and often free of charge. The sources include reports of both private and public sector

establishments, chambers of commerce, trade directories, websites of different government departments and industries. The secondary data available from existing reports and publications provide information about two aspects, viz., *market information* and *product features*.

3.3.2.1 Market Information

The existing reports and publications will primarily provide the following data:

1. Market size and structure;
2. Customers and suppliers;
3. Main products;
4. Market condition: new, matured or saturated?
5. Market response: satisfactory?
6. Methods of sales promotion: media, internet, e-mail, online, etc.?
7. Government policies, taxes, restrictions, etc.;
8. Legal aspects, viz., trade mark, copyright, patent, etc.;
9. Scope for expansion and diversification.

3.3.2.2 Product Features

The data available in this category include the following:

1. *Potential customers*: identification, location, etc.
2. *Product development*: new products or improvement of existing products necessary?
3. *Brand image*: satisfactory?
4. *Competitors*: identification, location, threat factor, pricing, distribution channels, new product introduced, etc.

3.4 STUDY OF MARKET CHARACTERISTICS

Based on the data gathered from Section 3.3 (Market Analysis Process), the following salient features of market characteristics can be arrived at:

- Market trend projection;
- Market segmentation;
- Price trend;
- Distribution and sales promotion;
- Consumer characteristics;
- Sources of supply;
- Socioeconomic policy of the government.

3.4.1 MARKET TREND PROJECTION

In this method, future demand of the product is assessed by extrapolating the trend of the past and existing demand into the future.

3.4.2 MARKET SEGMENTATION

Market segmentation helps an organization to study the current as well as prospective market demands, since nature of demand varies from one segment to another. For consumer products and services, this activity is done to suit the requirements of different socioeconomic groups, age groups, occupations, etc. For industrial products and services, the customers are usually other companies or government departments.

The activity is helpful in market characterization since the nature of demand fluctuates from segment to segment. The segments may be grouped as follows.

3.4.2.1 Product Specification

For example, commercial vehicles may cover small- and medium-capacity vans, trucks/trailers or passenger-carrying buses of various capacities.

3.4.2.2 Geographical Area

Area-wise classification of consumers for the products will require regular after-sales services.

3.4.2.3 Consumers

They may be divided into two groups, viz., domestic consumers and industrial consumers. Domestic consumers may further be subdivided income-wise. Similarly, industrial consumers may be subdivided industry-wise.

It should be emphasized here that different strategies for market development will be required for different segments.

3.4.3 PRICE TREND

Reliable data relating to ex-factory price, insurance and freight expenses, average wholesale and retail price, etc. need to be made available for assessing the price trend of products or services.

3.4.4 DISTRIBUTION AND SALES PROMOTION

Distribution system varies from product to product. Raw materials, intermediate products and final products have different distribution channels. Sales promotional methods utilizing internet/media and discount/gift schemes also vary according to the nature of the commodity.

3.4.5 CONSUMER CHARACTERISTICS

Consumers can be broadly characterized into the following categories:

- Residential location, age, sex, profession, income bracket, social background, etc.;
- Attitudes, preferences, habits, etc.

3.4.6 SOURCES OF SUPPLY

Information about existing sources of supply (foreign or domestic) is an important aspect of market characteristics. Possibility of replacement by another product needs to be studied as this might affect the price, quality, promotional efforts, etc. of the product.

3.4.7 GOVERNMENT POLICY

Socioeconomic policy of the government plays a vital role in influencing the demand and market of a product. This policy is indicated by:

- National plans;
- Import/export policies;
- Import duties;
- Export incentives;
- Subsidies;
- Credit controls;
- Industrial licensing;
- Tax on goods and services etc.

3.5 ASSESSMENT OF FUTURE DEMAND

Assessment of future demand is the next step after collecting information about the various market characteristics discussed in the previous section. There are several methods of assessment of future demands (forecasting). The three commonly used methods are as follows:

- Qualitative methods;
- Time-series projection methods;
- Casual methods.

In the present text, only brief description of these methods will be given. For further information, a study of specialist literature is recommended.

3.5.1 QUALITATIVE METHODS

In these methods, evaluation by experts is utilized to translate qualitative information into quantitative estimates. Under this category, two methods are important.

3.5.1.1 Jury of Executives Opinion Method

This method is a popular one. In this method, the opinions of a group of executives on expected future sales are pooled to assess the expected future sales and their values.

3.5.1.2 Delphi Method

In this method, the information is gathered not by face-to-face interaction, but through mail survey via a set of questionnaire and the responses thereof.

3.5.2 TIME-SERIES PROJECTION METHODS

Analysis of historical time series is used to generate demand forecasts. Under this category, three methods are important.

3.5.2.1 Trend Projection Method

In this method, trend of consumption in the past is extrapolated to assess the future consumption.

3.5.2.2 Exponential Smoothing Method

In this method, the observed errors are taken into account in assessing future consumption.

3.5.2.3 Moving Average Method

In this method, simple or weighted arithmetic average of previous consumption is considered for computing future consumptions.

3.5.3 CAUSAL METHODS

In causal methods, forecasts are developed on the basis of cause–effect relationships. Under this category, a more analytical approach based on a detailed quantitative manner is adopted to develop the forecasts. The important methods under this category are as follows:

- Chain ratio method;
- Consumption-level method;
- End-use method;
- Economic method.

3.5.3.1 Chain Ratio Method

This is a simple analytical method in which the total estimated market demand is multiplied by a factor to arrive at the sales potential of the organization.

3.5.3.2 Consumption-Level Method

The method is useful when the product is directly consumed and measures consumption level on the basis of income elasticity of demand and price elasticity of demand.

3.5.3.3 End-Use Method

The method is suitable for forecasting demands of intermediate products and involves the following steps:

- Step 1: Identify the possible use of the product
- Step 2: Estimate the consumption coefficient of the product for various uses
- Step 3: Project the output levels of the consuming industries
- Step 4: Assess the demand of the product

However, since the consumption coefficient may vary from time to time due to recent trend of fast technological changes and improvements, this method should be used judiciously.

3.5.3.4 Econometric Method

This is a sophisticated forecasting tool. In this method, the forecasting involves estimating quantitative economic relationship derived from economic theory. This is an expensive and data-demanding process, which is a constraint for using this method for day-to-day forecasting purpose.

3.5.4 UNCERTAINTIES IN ASSESSMENT OF DEMAND

Uncertainties in the assessment of demand arise from the following primary sources:

- Inadequate quality and quantity of data about past and present market condition;
- Limitations to handle unquantifiable factors;
- Unrealistic assumptions in the forecasting methods;
- Requirement of excessive data for more advanced methods of demand assessments;
- Technological change and development in the recent past, e.g., new product which is comparatively more efficient and economical than on existing product may penetrate into the market of the existing product;
- Change in government policies, e.g., providing licenses/incentives to new companies, restricting/liberalizing of import/export of certain commodities, etc. have significant effects on the business situation;
- Change in international political and/or socioeconomic situation may also have considerable effect on the industrial scenario;
- Discovery of alternative sources of raw materials;
- Climatic unpredictability and natural disasters, e.g., earthquake, Tsunami, flood, drought, directly or indirectly affect the demand of a wide range of products.

3.6 MARKET STRATEGY AND PLANNING

Market strategy and planning may need to be developed in detail for penetrating the market to the desired extent. The concerned activities include the following:

- Price setting;
- Distribution;
- Promotional activities;
- Customer service.

3.6.1 PRICE SETTING

While setting the price of a product or service, several balancing factors need to be considered. These include the following.

3.6.1.1 Customers

The organization needs to pose a question as to how much the customer is willing to pay for the benefit he or she gets out of the product or service offered. This perspective may, however, change in the future. Therefore, to achieve proper assessment on the issue, appointing a permanent research team is necessary. This may be impracticable for many organizations for lack of resources as well as time.

3.6.1.2 Competitors

Quality and price level of the product or service offered by the competitors quite often influence the price setting strategy of an organization. Unless these are competitive, customers will move away to competitors' product or service. Thus, it is essential that any organization must ensure that its products or services are more attractive than those of its competitors.

3.6.1.3 Costs

Every product or service is produced at a cost and the organization must cover its cost, including overhead expenses *plus* profit margin while setting the price.

3.6.1.4 Corporate Objectives

Corporate objective is an integral part of a firm's price setting policy. For example, a firm with a strong fund position may like to set the price low (and make smaller profit initially) in order to capture the market and outprice the competitors. Alternatively, if the prices are set high, the customers may not be willing to purchase the item, forcing the firm to lower the price. But if proper margin is not acceptable, it may be difficult for the firm to lower the price. The process of price setting in such cases will be a difficult balancing act.

3.6.2 DISTRIBUTION

Distribution methods are important for reaching the firm's product into the hands of the customers. There are several methods normally used for this purpose. These include the following:

- Field sales where the sales persons personally visit the prospective client's premises to deliver the product for sale;
- In house sales department which uses direct methods like internet and telephone for making the sale;
- Employment of intermediaries or distributors for distributing the product to the retailers who in their turn make the sale to the ultimate user;
- Self-service retail method;
- Full-service retail distribution channel.

3.6.3 PROMOTIONAL ACTIVITIES

Promotional activities broadly include advertising and branding. In recent years, digital advertising has taken a bold step in outstripping other types of promotional

activities. Market research may help in the planning and implementation of such exercises.

3.6.4 CUSTOMER SERVICE

Customer service has a strong influence on long-term market success of a product as well as on the reliability of the producer. The service starts from the time of installation of the product and continues thereafter also, in educating the customer, in providing warranties and satisfactory after-sales service etc. Availability of sufficient service outlets for this purpose is very important.

3.7 CONCLUDING REMARKS

Market analysis provides timely marketing information so that the business risks are reduced, sales opportunities are increased, current and future problems are identified, and appropriate remedial actions are taken. Also, this exercise suggests the likely selling price of the products or services over a specific period of time.

An effective market analysis procedure should follow a logical and systematic approach, comprising several distinctive activities. These activities have been briefly discussed in the foregoing sections.

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