

Stratagems Applied To Development Of New Product

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Abstract

In business and engineering, New Product Development (NPD) is the complete process of bringing a new product to market. New product development is described in the literature as the transformation of a market opportunity into a product available for sale [1] and it can be tangible (that is, something physical you can touch) or intangible (like a service, experience, or belief). A good understanding of customer needs and wants, the competitive environment and the nature of the market represent the top required factors for the success of a new product. Cost, time and quality are the main variables that drive the customer needs. Aimed at these three variables, companies develop continuous practices and strategies to better satisfy the customer requirements and increase their market share by a regulate development of new products. There are many uncertainties and challenges throughout the process which companies must face. The use of best practices and the elimination of barriers to communication are the main concerns for the management of NPD process.

Keywords: New Products Introduction, Stages of New Product Development

INTRODUCTION

Market research is the process of systematic gathering, recording and analyzing of data about customers, competitors and the market. Market research can help create a business plan, launch a new product or service, fine tune existing products and services, expand into new markets, etc. It can be used to determine which portion of the population will purchase the product/service, based on variables like age, gender, location and income level. It can be found out what market characteristics your target market has. With market research, companies can learn more about current and potential customers. The purpose of market research is to help companies make better business decisions about the development and marketing of new products. Market research represents the voice of the consumer in a company.

A list of questions that can be answered through market research:

What is happening in the market? What are the trends? Who are the competitors?

How do consumers talk about the products in the market?

Which needs are important? Are the needs being met by current products?

A simple example of what market research can do for a business is the following. At the company Chevrolet they brought several disciplines together in a cross-functional team to develop a concept for a completely new Corvette. This team enabled the marketers to come up with an alternative concept, one that balanced 4 attributes: comfort and convenience, quality, styling, and performance. This was considered radical because comfort and convenience were not traditional Corvette values. However, market research demonstrated that consumers supported the alternative concept. As a result the new Corvette was a huge success in the market.

There are two types of Market research, Primary and Secondary.

With market research you can get some kind of confirmation that there is a market for your idea, and that a successful launch and growth are possible.

NEED FOR THE STUDY

- This particular topic is chosen because every organization requires Marketing Research to sustain in long run and provide good services.
- Marketing Research helps to modify or develop new product as per the market needs and preferences.
- The purpose of market research is to help companies make better business decisions about the development and marketing of new products. Market research represents the voice of the consumer in a company.
- BISLERI is the first company to launch mineral water and ruled the market for several decades as the time passed many other players have entered into this segment to sustain.
- The competition company has to modify new products or introduce new products and watch Product Life Cycle and develop products as per customer preferences.
- For introducing or modifying product, Research plays an important role for knowing the taste and preferences of the customer.
- The purpose of market research is to help companies make better business decisions about the development and marketing of new products. Market research represents the voice of the consumer in a company.

SCOPE OF THE STUDY

- The research work “A study of market research on new product development, is to know about market research regarding Bisleri International Ltd.
- The scope of the study is limited. The study is a very minor contribution to the company as it is only restricted to the twin cities.

- The study would only be a drop in the ocean, Can help the distribution in this area.
- The study can be conducted on a national basic too with a large sample size and interviewing many numbers of respondents.

OBJECTIVES OF THE STUDY

- To know about the tastes and preferences of the consumers regarding mineral water.
- To find out the position of Bisleri.
- To know what changes consumers are expecting.
- To develop or modify product as per the tastes and preferences of the consumers.

To provide the company required information about new product development.

LIMATIONS OF THE STUDY

- The study was restricted to twin cities.
- The information given by the respondents may be biased.
- Suggestions given at the end of the report are based on the information collected, which may not be accurate due to the changing of the consumers.
- Due to time constraint more information could not be collected.
- Analysis could not be drawn for the entire questionnaire only specific questions have been analyzed and interpreted.

RESEARCH METHODOLOGY

- Applied research
- Exploratory research
- Descriptive pure research
- Research
- Diagnostic
- Evolution studies
- Action research
- Experimental research
- Survey study
- Historical
- Analytical study

TYPES OF RESEARCH

Among the different types of research I have used descriptive research.

DESCRIPTIVE RESEARCH

Descriptive study is a fact finding investigation with a adequate interpretation it focus on particular aspects of dimensions of problem study. In the study it is designed to gather descriptive information and provides sophisticated studies.

In my research using interviewing and questionnaire collects data.

SOURCE OF DATA

The source of data may be classified into: A) Primary source; B) Secondary source.

Primary Source

For my study I used primary source of data. Primary source are original sources from which I directly collected the data.

Primary data are first hand information collected through various methods such interviewing, mailing, etc.

Methods of Primary Data Collection

There are various methods of data collection. A method is different from a tool .While a method refers to the way or mode of gathering data, a tool is an instrument used for the method.

- A) Observation
- B) Interviewing
- C) Mail survey.
- D) Experimentation
- E) Simulation
- F) Projective technique.

In my survey I used the methods of interviewing and mailing, interviewing is the face -to-face conversation between the investigator and the respondent.

Mailing is used to collect data by getting questionnaires completed by respondents.

Tools for Data Collection

In my survey I used interview scheduled. The various methods involve the use of appropriate recording forms. The various instruments of data collections are

- Observationnaire
- Interview guide
- Interview schedule
- Mailed questionnaire
- Rating scale • Check list

- Opinionative
- Document schedule / data sheet
- Schedule for institutions
- Inventories

In my survey I used interview schedule and mailed questionnaire.

INTERVIEW SCHEDULE AND MAILED QUESTIONNAIRE

I used interview schedule and mailed questionnaire as a tool for data collection while a schedule used for interviewing, questionnaire is used for mailing.

I have complete list of questions on which information is elicited from the respondents.

Interviewing

The interview may be classified into

- Structure or directive interview
- Unstructured interview or non Directive
- Focused interview
- Clinical interview
- Depth interview

Structured or Directive Interview

From the above types of interview I used structure, directive interview. This is an interview with a detail standardize schedule. The same questions are put all the respondents and in the same order. Each question is asking the same way in each interview, promoting measurements reliability.

QUESTIONNAIRE

They may be classified into closed questions and opened questions in my questionnaire I used closed questions; in closed question methods I used two choices and multiple choice questions.

I used few open-ended questions.

Element Selection Technique

In this basis the samples may be either unrestricted or restricted. When each sample element is drawn individually from the population at large than the sample. So drawn is known as “unrestricted sample” where as all other forms of sampling are covered under the term “restricted sampling”.

Non-Probability Sampling

In my study I used non -probability sampling. In this type of sampling items for the sample are selected deliberately by me. Purposively choose the particular units of the consulting a sample on the basis that the small mass. That they so selected out huge once will be typical for representative of the whole.

The primary methods of non-probability sampling are :

- 1) Convenience sampling
- 2) Purposive or Judgment sampling
- 3) Quota sampling
- 4) Accident sampling
- 5) Show ball sampling

Convenience Sampling

When a sample is done according to its one's own convenience with out any systematic method, it is known as convenience sampling. Though this method is unscientific, some times none other than convenience sampling is possible.

Sample Design

- Sample Element
- Sample unit
- Sample frame work
- Sample Size
- Sample Extent

Sample Element

It means the person to whom you are going to conduct the interview or the person whom going to may for study. In a marketing research for durable product retailer will be sampling element.

Sample Unit

It is the difference among the retailers. For example they may be categories selling of retailers .

Sample Frame Work

The list of the address from the retailers, it means the name of the retailer , the residential address of the retailer and the telephone numbers obtained from the seller.

Sample Size

It means the number of persons going to interview the study.

Sample Extent

It is the area research to be conducted.

LITERATURE REVIEW

Market research is the process of systematic gathering, recording and analyzing of data about customers, competitors and the market. Market research can help create a business plan, launch a new product or service, fine tune existing products and services, expand into new markets, etc. It can be used to determine which portion of the population will purchase the product/service, based on variables like age, gender, location and income level. It can be found out what market characteristics your target market has. With market research, companies can learn more about current and potential customers.

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Market Research for Business Planning

Market research is discovering what people want, need, or believe. It can also involve discovering how they act. Once that research is complete it can be used to determine how to market your specific product. Whenever possible, try to reduce risks at the earliest possible stage. For example you could carry out market research early on and not wait until you are almost ready to enter the market. If early market research reveals that your business idea has real potential, you can use this information in planning the build-up of your business.

For starting up a business there are a few things should be found out through market research in order to know if your business is feasible. These are things like:

Market Information

Market information is making known the prices of the different commodities in the market, the supply and the demand. Information about the markets can be obtained in several different varieties and formats. The most basic form of market information is the best quotation and last sale data, including the number of shares, with respect to a particular security at a given time.

Examples of market information questions are:

1. Who are the customers?
2. Where are they located and how can they be contacted?
3. What quantity and quality do they want?
4. What is the best time to sell?
5. What is the long-term or historical price data over a number of years?
6. What is the expected production in the country?
7. Is there more demand for one product or another? etc.

Market Segmentation

Market segmentation is the division of the market or population into subgroups with similar motivations. Widely used bases for segmenting include geographic differences, personality differences, demographic differences, use of product differences, and psychographic differences.

Market Trends

The upward or downward movements of a market, during a period of time.

The market size is more difficult to estimate if you are starting with something completely new. In this case, you will have to derive the figures from the number of potential customers or customer segments.

But besides information about the target market you also need information about your competitor, your customers, products etc. A few techniques are:

- Customer analysis
- Competitor analysis
- Risk analysis
- Product research
- Advertising research

In the last chapter you can read how to perform market research, with interviews and questionnaires, but there is already a lot of information available. Market research firms and industry experts publish much of their information on websites, and in trade and business magazines.

Reference sites index these magazines, many offer the texts online and if not the libraries stock them. Trade associations publish many listings and statistics on their websites as well as in hard copy publications. So, there is already a lot of information available.

Perform Market Research

Figure 1: Meta-process Model for Market Research

This chapter introduces the steps involved in the market research process. It also provides you with a brief preview of each of the steps necessary to conduct a market research effort. As you can see in Figure 1, the market research process has 4 basic steps. These steps include:

1. Defining the research problem
2. Establishing the research design
3. Collecting and analysing data
4. Formulate findings

Figure 1 is the meta-process model of market research. The model shows every activity that must be performed. And every activity has a few sequential activities. Every sequential activity is connected with an arrow which implies that these activities need to be carried out in a pre-defined order. Before these 4 steps are discussed it is important to make a few comments about these steps. First although the list does strongly imply an orderly step-by-step process, it is rare that a research project follows these steps in the exact order that they are presented in the figure.

Market research is more of an interactive process whereby a researcher, by discovering something in a previous step, may move backward in the process and begin again at another step. Finding some new information while collecting data, may cause the researcher to establish different research objectives. In the following the different market research steps are described

Defining the Research Problem

The step defining the research problem exists of two main steps: (1) formulating the problem and (2) establishing research objectives.

Defining the problem is the single most important step in the market research process. A clear statement of the problem is a key to a good research. A firm may spend hundreds or thousands of dollars doing market research, but if it has not correctly identified the problem, those dollars are wasted. In our case it is obvious that the problem here is setting up a business.

But even if this is clear, you still need to know what exactly you need to know to make the new business a success and what specific related to the product is difficult to find out. Problems that may be encountered are: it is unknown what potential markets there are, what customer groups are interested in your products, who the competitors are? After formulating

your problem, you need to formulate your research questions. What questions need to be answered and which possible sub-questions do you have.

With the problem or opportunity defined, the next step is to set objectives for your market research operations. Research objectives, related to and determined by the problem formulation, are set so that when achieved they provide the necessary information to solve the problem. A good way of setting research objectives is to ask, “What information is needed in order to solve the problem?”

Your objective might be to explore the nature of a problem so you may further define it, or perhaps it is to determine how many people will buy your product packaged in a certain way and offered at a certain price. Your objective might even be to test possible cause and effect relationships. For example, if you lower your price, how much will it increase your sales volume? And what impact will it have on your profit?

Clear objectives can lead to clear results. An example of this is a situation at Camaro/Firebird. Auto manufacturers are sometimes criticized for creating expensive vehicles with unwanted features and technologies that do not meet the needs of the target market. To avoid this trap engineering team of this company turned to market research to evaluate how changes in performance and fuel economy would affect sales volume and customer satisfaction. It turned out that customers were willing to pay more for greater performance if the car also offered simultaneous increases in fuel economy.

The problem description, the research question, sub questions and the research objectives are part of an overall document problem description.

After describing and formulating the problem and the objectives, the next step is to prepare a detailed and realistic time frame to complete all steps of the market research process. If your business operates in cycles, establish target dates that will allow the best accessibility to your market. For example, a holiday greeting card business may want to conduct research before or around the holiday season buying period, when their customers are most likely to be thinking about their purchases.

Selecting and Establishing Research Design

The step selecting and establishing research design consists of 3 main steps: (1) select the research design, (2) identify information types and sources and (3) determine and design research instrument.

Select the Research Design

As stated earlier, every research project and every business is different. Still, there are enough commonalities among research projects to categorize them by research methods and procedures used to collect and analyze data.

There are three types of research design:

- Exploratory research design
- Descriptive research
- Causal research

Exploratory research is defined as collecting information in an unstructured and informal way. For example if the owners of a new restaurant often eat out at competitor's restaurants in order to gather information about menu selections, prices and service quality.

Descriptive research refers to a set of methods and procedures that describe marketing variables. Descriptive studies portray these variables by answering who, what, why and how questions. These types of research studies may describe such things as consumers' attitudes, intentions, and behaviours, or the number of competitors and their strategies.

Causal research design is conducted by controlling various factors to determine which factor is causing the problem. It allows you to isolate causes and effects. By changing one factor, say price you can monitor its effects on a key consequence such as sales. Although causal research can give you a high level of understanding of the variable you are studying, the designs often require experiments that are complex and expensive.

Identify Information Types and Sources

There are two types of information available to a market researcher: primary data and secondary data. Primary data is original information gathered for a specific purpose. Secondary data refers to information that already exists somewhere and has been collected for some other purpose. Both types of research have a number of activities and methods of conducting associated with them.

Secondary research is usually faster and less expensive to obtain than primary research. Gathering secondary research may be as simple as making a trip to a local library or business information center or browsing the Internet. There is already a lot of statistics about different businesses that can be used for this research.

Information Source

Secondary data help identify the problem; better define problem; develop an approach to problem; formulate an appropriate research design; answer certain research questions and test some research hypotheses; Interpret primary data more insightfully.

Determining and Design Research Instrument

After determining which type(s) of information are needed, the methods of accessing data must be determined. There are several different methods of collecting data. These methods include telephone surveys, mail surveys, personal interviews or group surveys.

The actual design of the research instrument, the data collection form that is used to ask and record the information is critical to the success of the project. There are two basic methods to collect information: by asking questions or by observing. The most common research instrument is the questionnaire. There are two types of forms: structured and unstructured. Structured questionnaires list close-end questions. These include multiple choice questions which offer respondents the ability to answer "yes" or "no" or choose from a list of several answer choices. Close-end questions also include scales refer to questions that ask respondents to rank their answers at a particular point on a scale. Unstructured questionnaires have open-ended questions. Respondents can answer in their own words.

Collecting and Analyzing Data

Data collection is usually done by students. They are employed by field data collection companies to collect primary data. A choice has to be made between collecting the data yourself or hiring an external office who are specialized in interviews.

Data analysis is needed to give the raw data any meaning. The first step in analyzing the data is cleaning the data. This is the process of checking the raw data to verify that the data has been correctly entered into the files from the data collection form.

After that the data have to be coded. This is the process of assigning all response categories a numerical value. For example males = 1, females = 2. After that the data can be tabulated, which refers to the actual counting of the number of observations that fall in to each possible response category.

Data can also be collected on a smaller scale to obtain more qualitative data. One frequently used form of qualitative data collection is the focus group. Focus Groups are generally comprised of a small selection of the target audience. The participants are then queried and the discussions are guided by a moderator. The group is often recorded and/or viewed by the marketing team or others via a two-way mirror or closed circuit system. Focus group companies exist worldwide. Some specialize in certain industries, such as the legal community, while others provide more general services.

Research is the search for and retrieval of existing, discovery or creation of new information or knowledge for a specific purpose. Research has many categories, from medical research to literary research. 'Marketing research is a form of business research, and Business-to-Business (B2B) Marketing Research, or Business Marketing Research, previously known as Industrial Marketing Research.

B2B Marketing Research investigates the markets for products sold by one business to another, rather than to consumers. Consumer Marketing Research is a form of applied sociology which concentrates on understanding the behaviors, whims and preferences, of consumers in a market-based economy. The field of consumer marketing research as a statistical science was pioneered by Arthur Nielsen with the founding of the ACNielsen Company in 1923.

In addition to marketing research, other forms of business research include:

- Market research - is broader in scope and examines all aspects of a business environment. It asks questions about competitors, market structure, government regulations, economic trends, technological advances, and numerous other factors that make up the business environment. (See Environmental scanning.)

Sometimes the term refers more particularly to the financial analysis of companies, industries, or sectors. In this case, financial analysts usually carry out the research and provide the results to investment advisors and potential investors.

- Product research - This looks at what products can be produced with available technology, and what new product innovations near-future technology can develop (see New Product Development)

- Advertising Research - is a specialized form of marketing research conducted to improve the efficacy of advertising, copy testing, also known as pre-testing, is a form of customized

research that predicts in-market performance of an ad before it airs by analyzing audience levels of attention, brand linkage, motivation, entertainment, and communication, as well as breaking down the ad's Flow of Attention and Flow of Emotion. Pre-testing is also used on ads still in rough (roughomatic or animatic) form.

TYPES OF MARKETING

RESEARCH

Marketing research techniques come in many forms, including:

- Ad Tracking - periodic or continuous in-market research to monitor a brand's performance using measures such as brand awareness, brand preference, and product usage.
- Advertising Research - used to predict copy testing or track the efficacy of advertisements for any medium, measured by the ad's ability to get attention, communicate the message, build the brand's image, and motivate the consumer to purchase the product or service.
- Brand equity research - how favorably do consumers view the brand?
- Brand name testing - what do consumers feel about the names of the products?
- Commercial eye tracking research - examine advertisements, package designs, websites, etc., by analyzing visual behavior of the consumer.
- Concept testing - to test the acceptance of a concept by target consumers.
- Consumer decision process research - to determine what motivates people to buy and what decision-making process they use.
- Copy testing - predicts in-market performance of an ad before it airs by analyzing audience levels of attention, brand linkage, motivation, entertainment, and communication, as well as breaking down the ad's Flow of Attention and Flow of Emotion.
- Customer satisfaction studies - exit interviews or surveys that determine a customer's level of satisfaction with the quality of the transaction.
- Demand estimation - to determine the approximate level of demand for the product.
- Distribution channel audits - to assess distributors' and retailers' attitudes toward a product, brand, or company.

Internet Strategic Intelligence - searching for customer opinions in the Internet: chats, forums, web pages, blogs, where people express freely about their experiences with products, becoming strong "opinion formers"

Marketing Effectiveness and analytics Building models and measuring results to determine the effectiveness of individual marketing activities.

Mystery shopping - An employee or representative of the market research firm anonymously contacts a salesperson and indicates he or she is shopping for a product. The shopper then records the entire experience. This method is often used for quality control or for researching competitors' products.

SUGGESTIONS

It is advice to modify product in an attractive way as many of the respondents give utmost importance to packaging.

- It is better to develop sales promotion program me to sustain competition.
- Quality should not be neglected while developing a new product. Create a trade-off between price and quality.
- It is important of the customers s satisfaction, every changes near will be explammeshan is customers satisfaction.
- Quantity also the customer bye easy packs making observation.

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