A Theoritical Approach to Total Quality Concept in Database Marketing

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"Costumers define the quality"
Armand FEIGENBAUM

Abstract

Data-based marketing is a process arising from the use of technological developments in the marketing sector. It can be possible to add efficiency and quality for this process with total quality management through holistic approach. After Data-Based Marketing and Total Quality Management having explained on the aforementioned work, it was tried to dwell on the connection of the data-based marketing with the total quality management.

Key words: Data Base, Data-Base Marketing, Quality, Total Quality

1. Introduction

In a globalizing world and in a space that the competition is rapidly increasing between business enterprises, it is inevitable for business enterprises, which have understanding of contemporary marketing, to attach great importance to their customers' wishes and desires, to customer satisfaction/contentment and customer relationship. So the way to achieve this literally depends on the recognition of the current and the potential human being (entity) called as **'customer or consumer'** collecting data related to geographic, psychological, economic, personal, and demographic characteristics. Today, thanks to the rapidly developing technologies, it is extremely important to create data bases and obtain, process and use any (kind) information on customer-oriented approach about the customer.

Data-based marketing has a major role in achieving this. Data-based marketing is a customer-oriented and future marketing application containing a lot of information. Data-based marketing should be considered primarily as a process that can be consistently provided the establishment of a relationship and can obtain sufficient information about existing customers and also use this information to encourage repeat sales.
In this study, it was attempted to emphasize the importance of the data-based marketing explaining within the concept (framework) of total quality management approach.

2. Data Base

Throughout history man has sought fast and reliable ways in order to store information which is able to retrieve at any time. Since 1950s, computers have been progressively a part in human life so the information has started to transfer into them. After 1980s, thanks to the enter of PCs into homes, the idea that computers were required only for companies became old-fashioned. Today, almost everything has become electronic (which is) shortly defined as "e" so some concepts has come into question such as *e-mail, e-shopping, e-commerce, e- retailing, e-marketing, e-government, e-education* and so on. It is also important where all the information related to these transactions be collected, how and to whom this information be conveyed (Broad, 2006, p. 71). It should be created data warehousing (a pool of data) that provides simple, reliable and actual access to data which is an indispensable part of information age.

According to the dictionary of American History, a database is (a system indented) to gather data in computer so as to retrieve it (Carpenter, 2001, p. 40). A database can be defined as the storage which allows multi-functional use of data related to each other without repetition (Soyuyuce, Hünkar &Tabanlıoglu, 2011). The database is a set of interrelated files. In this application, data is physically collected in a central location instead of being kept in separate files. In this case, repeated and unwanted data in the system is eliminated and a collective update can be done (Benligiray, 2005, p. 296). A database, in its broadest sense, is the storage which allows (provides) multi-functional use of (interrelated) data related to each other avoiding of repetition.

3. Data-Base Markrting

Companies which know their Individual customers may offer their products, messages, method of sending goods and payment, in the most attractive ways to them in accordance of wishes of individual customers (Kotler, 2005, p. 652-654). There have been new developments in the field of marketing. One of them is data-based marketing. Technological advances, especially in recent years, have led to these types of marketing frequently mentioned. To make a more effective marketing, Businesses should keep up with the changes in the structure of target markets and should benefit from data-based marketing approach. Perhaps more importantly, the fragmentation of the markets, in the direction of the fragmentation from section to breach, beyond that, from breach to individual market, revealed the importance of data-based market.

What is Direct Marketing? Is Mass Marketing or Database Marketing? (Sezer, 2007, p. 9). The success of direct marketing efforts greatly depends on the data-based marketing. On the other hand, when the database is used to develop relationships with customers, it is not wrong to say that it means almost the same with the relationship marketing (Varınlı, 2006, p. 46-60). Data-based Marketing has a direct relation with the relationship marketing. Businesses show a relational marketing approach for a productive relationship with the customer by creating a data warehouse about their customers. In general, data-based marketing can be described as a collection of data about customers. The main purpose of customer relationship management which has very important place in marketing communications is to develop the database marketing.

The database marketing system, in many ways, is the driving force behind integrated marketing communications approach. The rapid development of data base management companies in the 1990s, led to a two-way communication with thousands of customers without any geographic boundary (Schoenbachler, 1997, p. 5; Gülmez, 2003, p. 5; Carpenter, 2001, p. 40; Yurdakul, 2007, p. 1). The database is used to support to provide information for computer-assisted sales, to make direct marketing and customer information and service systems direct marketing, are used to support. According to Kotler and Armstrong the customer database is an organized collection of comprehensive data about individual customers or prospects, including geographic, demographic, psychographic and buying behavior data. Companies need to invest in marketing data base system in order to implement a successful integrated direct marketing, marketing companies need to invest in data base system (Pickton & Broderick, 2001, p. 50; Yurdakul, 2007, p. 1).

3.1   The Emergence of the Concept and Definition of Database Marketing

With the Increase in the value of knowledge and development of the customer- oriented marketing approach in businesses, companies have tended to systematic studies to gather and store information about their customers and use this information in a useful way. This orientation has revealed the concept of data-based marketing. In short, data-based marketing has a meaning and practice beyond being short-term and profitable means of communication and also it is a contemporary method satisfying, developing and running more effective customer relationships. The database marketing is an organized and a systematic collection of data about various people and/or organizations such as individual customer and the candidates becoming customer who are accessible and workable for the purpose of finding clues leading to the sale and classifying/grading them according to their importance and also maintaining the sale of product and service and the (long-term) customer relationships (Duran, 2010, p. 1).

4. The Challenges of Use of Data-Based Marketing

Data-based marketing is a customer-oriented, knowledge-intensive and prudential marketing application (Duran, 2010, p. 1). Data-based marketing, first of all, should be considered as a process that gets enough information about existing customers, uses this information to encourage repeat sales and establishes a permanent relationship. Kotler, lists data-based marketing challenges as follows (Kotler, 2005, p. 188-191):
First challenge is that the seizure of the most important information is the transaction history for each buyer (recipient, client, and consumer). Knowing what a customer bought in the past, gives many hints about what he will buy next. Collecting demographic information about each buyer can be useful for a business. It signifies age, education, income, family size and other features for consumers. As for corporate buyers, it means job position, job responsibilities, and contact addresses and business relationships.

When it comes to individual customers, it can also be added psychographic information that defines customers' occupations, interests, opinions and how the customers think and how they make a decision and affect others The second challenge is to get this information. Sellers (salesman) need to be trained to collect useful information for each sales visit and then put this information into the customer file. Tele-marketers, customers or credit rating agencies can also gather additional information by phone. The third challenge is to preserve maintain and update the information. Each year, approximately 20% of the customer database information can become the old information. For updating the information, there should be some   tele-marketers for calling a group of customers by telephone every business day.

The fourth challenge is to use the information. Many companies cannot use the information efficiently. There is a lot of scanner data about the procurement of individual customers of Supermarket chains; this data however is not available for one-to-one marketing. Banks gather a wealth of information for the commercial accounts but most of them are just waiting without analysis. These companies, at least, should employ an expert data miner. The expert data miner can bring interesting trends, segments and opportunities to light, practicing advanced statistical techniques (Kotler, 2005, p. 188-191). Although the retail sector has some information about its customers, it doesn't have enough information about those who do not shop by card or cash. The information about those who shop by credit card is also extremely limited. The ideal application in Data-based marketing is to get a full profile of all customers individually.

5.Data-Based Marketing Purposes

The concept of modern marketing is prone to mass marketing prioritizes profitability, continuity and investment objectives in marketing. As for Marketing communication messages are created for the purpose of the promotion. For this purpose, data-based marketing is a promotion-oriented application. On the other hand, the relationship marketing is an application which was initiated as customer -oriented and then gradually moved away from mass approach (Babacan, 2010, p. 16). In traditional marketing approach, the same product and message are attempted to send to a large group of consumer. The strategic objective of data-based marketing, however, is just the opposite of that. The ultimate goal of a data-based marketing is to create earning opportunities for both consumers and marketers to earn by reducing marketing costs, increasing sales and profitability and creating customer loyalty. Varinli lists of data-based marketing objectives as follows (Varinli, 2006, p. 46-60):

- The customers' credit status can be examined effectively by the database. As entered to the company's data base, the previous credit status of customers will appear at different levels and the opportunity to apply the appropriate strategy comes out.
- As a result of segmentation of Capital markets, both increasing consumers' income and non-need products require different features.
- In addition, vendors have become a more specialist and they are making efforts to obtain more information from various sources about the new products.
- Different responses are expected from the customers while having a personal dialogue with them.

Yurdakul also counts the following benefits in addition to the above (Yurdakul, 2007, p. 2; Hepkul, 1992, p. 12-13):
- The data base, allows the determination of customer group to ensure maximum return. In this way, the company will determine the customers with whom the company will have a long-term relationship.
- It creates new customers. It allows the company to recognize its existing customers and shows what kind of customer base that the company's products and services target.
- Thanks to database, it is possible to communicate with customer individually after sales satisfaction and also to ask customers' ideas and suggestions about the product and inform customers about facilities such as service, maintenance, free replacement etc.
- It makes it difficult for competitors to obtain information about the company's marketing efforts. Because the company contact with its customers individually.

For the continuity of customer satisfaction and quality, every company and its employees are responsible for adopting customer-oriented culture and keeping it within the organization.

6. Quality Management

Quality discussion seems to be started earlier than estimated. Because Hammurabi, the king of Babylon, enacted some of the law codes, counted as one of the earliest examples about quality assurance. These law codes significantly prove that quality debate was made in his time.
A short excerpt from them (These law codes) are as follows:

- If a builder builds a house for someone, and does not construct it properly, and the house which he built falls in and kills its owner, then that builder shall be put to death.
- If it kills the son of the owner, the son of that builder shall be put to death.
- If it kills a slave of the owner, then he shall pay, slave for slave, to the owner of the house.
- If it ruins goods, he shall make compensation for all that has been ruined, and inasmuch as he did not construct properly this house which he built and it fell, he shall re-erect the house from his own means (The King of Babilon, Hammurabi, 1728-1686 B.C).

These law codes had a very big function for the understanding of quality and the fulfillment of quality standards. Because the builder (company) had to make compensation for his entire fault. This sometimes used to cause to spending a lot of money, time, and even the death of builder. Furthermore, companies not wanting to take these risks, then, had to make a structure plan which had a very good quality assurance, quality management and quality management systems (Osanna, 2002; Celik, 2008, p. 23).

6.1   Quality Concept

It would be better to clarify the concept of quality for understanding the subject before unveiling the concept of quality management. It seems very easy to define the concept of Quality. Because quality is a concept that we hear all the time and use in daily life.
Contrary to what is expected it is difficult to define this concept. In this context, it is very difficult to decide which definition is more satisfactory defining the concept of quality (Howard, 1990, p. 7; Bright, 2004, p. 3). Quality is a judgment of customer or user who buys goods and services). Despite many definitions in various ways about quality concept, all these definitions converge on that quality is a competent to supply customers' needs and satisfactions with goods and services (Aksu, 2002, p. 88).

6.2   Quality of Goods and Services and the Their Differences

Goods: a concrete object that embodies   physical and chemical properties.
Services: defined as abstract elements such as intangible, perishability and cannot be standardized In terms of quality.
Goods Quality, refers to quality that is defined as a variety of perceptions by consumers using the product and benefit from it.
It it is easier to define the physical features of the concept of goods and to measure the quality of goods. It is more difficult to define service(s) and measure its quality than the quality of goods. The main reason of this is that service does not have a concrete object like goods (Merter, 2006, p. 18). Even though it makes it difficult to determine the quality of service It is not impossible to question it.

6.3   Total Quality Management (TQM)

In today's globally competitive environment due to both employees' and customers' needs/satisfactions come into prominence, businesses have looked for new ways and so Total Quality Philosophy, meaning everything in the organization is under quality, has emerged. TQM is a complete management system which creates a totally customer-oriented business culture (Merter, 2006, p. 47). The concept of total quality as the first time was introduced by Dr. Armand V. Feigenbaum. He devised the concept of Total Quality Control, later known as Total Quality Management (TQM). He described Total quality as a study which was carried out with all the business units and employees. Total quality management is to ensure suitability of goods and services according to requirements specified by the internal and external customers with the participation of all departments and employees in the business (Bright, 2004, 15).

7. The Concept of Total Quality in Data-Based Marketing

The success of the Data-Based Marketing depends on an effective and efficient
Utilization of good quality and suitable (right) data bases for the purposes of Tending to the needs of the target market more effectively and in a healthy way and providing the highest quality performance for all areas, determining the necessary developments reviewing constantly all the processes creating an effective competitive strategy, Determining A team approach to solving problem, And Determining effective ways in the field of communication Data-Based Marketing Eliminates errors and in doing so takes advantage of statistical methods of measurement. The essence of Data-Based Marketing is composed with some stages such as: the continuous development of data warehousing, data analysis, data optimization, data updating, fast accessibility and retrievability of data. Since all these stages are important in Data-Based Marketing process the quality must be taken into consideration at these stages (Shepherd, 2004, p. 3). Although each stage of this process is of great importance, the first two stages (Data warehousing and Data analysis) are more important.

7.1   Data Warehousing (Storage)

Data warehousing is the storage of information about customers such as: names, home address, demographic characteristics, communication history (complaints, product returns, etc.), purchase (buying) history, credit and payments, phone and / or e-mail contacts (addresses) (Varinli, 2006, p. 46-60). This can also be called as 'inventory information'. If this data is correct, safe and up-to-date (actual) then we can talk about 'data quality'. Customers and customer candidates are determined at the first stage of the Data-based Marketing process. Data base used at this stage is basically a database for stored product information. Business can find the names of customers through its own internal resources such as warranty, registration cards, accounting records. In addition, it can obtain from intermediaries, distributors or sales representatives (Shepherd, 2005, p. 7). Especially it should be noted that current information are obtained from intermediaries. Generally, the data obtained from consumers, can be divided in two groups: promotional data and buying behavior data.

Promotional Data, includes   *demographic characteristics* such as: e-mail, gender, age (date of birth), educational level, occupation, income level, marital status (if there is a marriage; date of marriage-marriage duration, husband's /wife's name, date of birth, occupation, education level, if there is a child/children; child's name/children's names, date of birth, educational level and so on.) and also *contact information* such as: address (home and work), phone (work, home and mobile),.and e-mail contacts.

Buying Behavior Data includes some issues about customers such as: Shopping frequency, the latest shopping (information), the type, quantity and the monetary value of the product, lastly complaints, and product returns (Varinli, 2006, p. 46-60). Databases used in this stage, constantly grow and a customer can take place several times in the database. To determine whether the customer is the same customer (person) or not and to protect total quality preventing recurrence makes the data both actual and effective.

In this context, the total quality approach in Data base will help to maximize the business profit margin preventing repetition of customers' data/or messages and applications (e.g. catalog waste) which might be costly for business.

7.2   Data analysis

At this stage, customer groups with similar needs for different products are determined focusing more on customers. It is also made at this stage, more precise segmentation and more specific targeting due to the use of Database Marketing and Total Quality. Furthermore, it ensures that all customer contact information about the company is available at any time. Quality data base used in this stage can provide significant benefits. For example, in a prepared marketing campaign, data base is available (practicable), with the purpose of ensuring total quality, market segmentation/and target market selection testing campaigns and media selection (Shepherd, 2005, p. 8).

8. Conclusions

In Data-Based Marketing, Total quality play a role in customer relationship providing quality, interaction, satisfaction and development. Total Quality Concept, In Data-Based Marketing, is also utilizable to obtain reliable and correct results on many issues such as Customer and target market identification, ensuring (providing) the loyalty of existing customers and being motivated to new purchases, firm's sales analysis, the creation of marketing power and even the determination of price policies. For the implementation of the Data-Based Marketing, first of all, it should be created a high quality and an effective data base.

Total Quality enables to predict customer needs in Data-Based Marketing. Thus, higher-quality, more efficient and profitable operations can be done gaining customer loyalty (Shepherd, 2005, p. 11-12). Moreover, Total Quality Concept, in Data-Based Marketing, focus on the objectives of adding value to the customer-to-business relationship and to gain new customers by means of existing customers retention With the quality of data-based dialogue which provides contact with all the consumer by communication channels at all the consumer touch points. In short, databases create a sense of making better quality and quality assurance in marketing efforts and in some programs such as communication campaigns etc.

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