Applications of Marketing Information System in Banking Sector: A Study on VakıfBank

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Abstract

Marketing managers have discovered importance of information and information-based marketing system for a long time. They have realized that information is a tool which can change the competition conditions. Companies may gather required information by itself or outsourcing. It is known that many problems have been occurred on information gathering and using process. The purpose of this study is to examine concept of Marketing Information System by literature review and to reveal issues of banking sector applications on information gathering and using. Semi-structured interviewing which is one of the qualitative research methods was used in this study. Implications are discussed and recommendations are given for the banking sector.

Keywords: Marketing Information System, **Information-based Marketing**, Banking Sector

Introduction

In the periods when manufacturer and consumer populations were relatively small, businesses were capable of gathering all sorts of information about their customers and competitors conveniently. However, in parallel to globalization, as numbers of consumers and competitors have increased, companies experienced more difficulty with reaching information and they further in need of information. Recent developments in economic, socio-cultural and technology necessitated more detailed market analysis and thus intensified the need for information. Evolving marketing understanding steered businesses to monitor their customers and changes in consumers closely; and to orientate the competition creating a loyal consumer profile. Now that, the more accurate and current information available for companies, the great competitive advantage they

acquire and succeed to persist loyalty of their customers and avoid losing them to their competitors.

According to the Turkish Linguistic Society (TDK, 2017), information is described as "i) the whole of phenomenon, fact and principles that could be comprehended by human beings; ii) Reality and datum that could be acquired through learning, research or observation". It is observed that information is described differently in the relevant literature. Koza (2008:57) describes information as data compiled, classified, organized, analyzed for interpretation, transmitted to the relevant parties for effective decision making, processed for providing more meaningful and valuable form by means of various methods; an which might be influent on decisions and behaviors.

According to Drucker (2001), future societies will be referred as information societies; information will be fundamental resource and knowledgeable employees will be dominant group in professional life. Information travels effortlessly, it will be borderless and easy to gain via formal education, so the success and the failures in work life will not depend on pure knowledge. In our contemporary time, as it was foreseen by Drucker, dominance of knowledgeable employees at organizations has evolved management understanding of administrations and information has started to be seen as a fundamental manufacturing factor. Especially the fact that today's managers need to make fast and accurate decisions in the face of problems encountered has increased significance of information.

Leonidouand and Theodosiou (2004; 12) summarized the factors contributing in significance of information in decision making process are reported in the marketing research literature (Churchill, 2001), (Tull and Hawkins, 1993), (Zikmund, 2000) as follows:

- For better understanding of competitors in the core market of the company,

- Monitoring changes in market conditions evolving with great pace,

- Designing reliable marketing plans and strategies,

- Resolving certain marketing problems such as introduction of new products to market, price change, establishment of distribution channels, and adoption of a promotion methods,

- Enhancing monitoring of marketing strategy and implementing marketing control by evaluating company performance more accurately.

In parallel to changing management understanding, information has been put in prominent place especially with decisions on marketing. In businesses, according to Kotler et al. (1996: 210), a marketing manager should be aware that "they need to manage future so that they could succeed in business management; and managing future requires them to manage information". Knowledge is critical for the marketing function, in recent

years, with the launch of information technologies the way marketing is done and customer information management is changed. Availability of huge volume of data about customers created competitive advantage for companies (Shaw et al. 2001: 127). Porter and Millar (1985: 149,150) emphasized that information revolution is inevitable wave that no company can escape and explained how information technologies are changing the way companies operate and entire production process. Narverand and Slater (1990) describe information as a substantial resource which could increase competition advantage; and state that information acquired by a company about their customers and competitors are so valuable in development of company's market orientation (Keh et al., 2007; 597). Contemporary marketing managers have better realized the importance of gathering information as much as possible and establishing a marketing system based on this information.

Today, having substantial amount of information is not enough for companies alone. They need to have systems to fetch information sooner as possible so that they could utilize information adequately. What needs to be done at organizations is to create the most adequate information system that would answer companies' unique needs through research and development (R&D) efforts and to develop associated information memory (Hasiloglu, 2013:358). Especially, technological advances have allowed companies to establish necessary marketing information systems (MIS) for collecting target information and their proliferation.

The preliminary description of MIS was drawn by Coxan and Good (1967) as series of procedures and methods developed planned analysis and presentation of information in a certain order for assisting to marketing decisions. Brien and Stafford (1968), Smith et al. (1968) and Buzzell et al. (1969) have further expanded aforesaid description and they classified marketing information in groups of control, planning, and research-based information. According to their descriptions, objective of marketing systems is to collect, sort, analyze, evaluate and share the right information at the right time for planning, application and control activities for marketing managers (Talvinen, 1995;10).

Long-term marketing decision of companies considers which products to be launched, target markets, how to transfer their products to consumers and how to convince consumers to buy their products. MIS allows today's companies to make these strategic decisions in fast and accurate manner. Of course these systems are not only for manufacturers; it is known that they are exploited in service industry to enhance service quality extensively. Especially with the banking industry, necessity of establishing MIS for gathering detailed information about customers and

competitors for building banking applications based on this information is undeniable.

Marketing Information Systems in Banking Industry: the VakıfBank Case

As customer-oriented marketing understanding has progressively been dominating across banking industry, the need for collection, storage and analysis of all sorts of information of customers such as their demographic and economic information as well as their expectations, requests and complaints has emerged. To that end, customer data bases have become prominent data resource at the point of building customer profile for banking institutions. Shaw et al. (2001: 133) enumerates the characteristics that could be utilized by marketing experts in building up customer profile as follows; frequency of purchase, amount purchased, the last purchase date, characteristics of customer groups, life-long values of customers, purchasing patterns of customers, and results of marketing programs. Keeping log of these information in bank data bases and their regular update allow bank managers to make market-oriented decisions.

Banking institutions utilize numbers of methods in building a data base. Customer information are collected by means of sales represents using advanced technological infra structure. It is known that majority of banking institutions in the industry use personal information forms for gathering information from individuals in private banking. This method allows collecting information on both new customers and current customers. Data included in customer information forms submitted to customers in banks for filling in and which aim to collect information about them are considered as primary data as well. Banks also collaborate with many other institutions for sharing existing data bases as secondary data. Customer information logged by the Republic of Turkey Central Bank and their credit risk information maintained by the Bureau of Institutional Records are considered important especially for recognizing commercial customers. Moreover, data bases maintained by Chambers of Commerce, Industry, Organized Industrial Zones, Unions of Exporters, Agricultural Credit Cooperatives, and R.T. Ministry of Development are utilized.

Method

It is common that banking institutions encounter various problems in terms of collecting information and using them in line with their objectives. The purpose of the present study is to investigate MIS through reviewing the relevant literature; and especially to determine the prominent problems encountered with the applications in the banking industry by managers in terms of gathering and utilizing information.

Government-subsidized banks experience considerably less moderate customer anxiety in comparison with private banks owing to the sense of trust

created among customers. This situation might result in experiencing more marketing problems. VakıfBank (VakıfBank) determined by purposeful sampling method was included in the scope of the present research since it is member of group of publicly-capitalized banks and it is ranked among the 10 largest banks in Turkey in terms of their current equity size by the Turkish Union of Banks in 2015.

In this study, semi-structured interview method, one of the qualitative research methods, was employed. Interviews were held in person with İzmir District Marketing Manager working at the VakıfBank Directorate of Marketing and Coordination, and with the employees at the same branch. In these interviews, 20 questions determined through review on the relevant literature for gathering detailed information on operation of MIS of the bank and the problems encountered with the system were employed. Additional questions were added onto the semi-structured interview form during the appointments in order to determine how the necessary system was established and used for more efficient use of marketing resources of VakıfBank.

Findings

VakıfBank first classifies bank customers for purposes of building customer data bases. In this customer classification, which could be referred as market segmentation, customers are grouped in two fundamental groups: Private and Commercial Customers. Customers from the private banking group are distributed in sub-groups on the basis of their earnings as public sector employees, private sector employees and VIP customers. On the other hand with the Commercial Banking group, customers are grouped in SME, Commercial Institution and Agricultural on the basis of their net gross sales. VakıfBank, in line with this classification policy, reaches out these customers by means of Private Portfolio Managers and Commercial Portfolio Managers.

VakıfBank organizes its marketing activities through the market segmentation and differentiate marketing mix offered to customers as well. When product and service mix preferences adopted by banking institutions are taken into consideration, a remarkable resemblance among them could be observed. Particularly in the banking industry, organizations could easily follow each other closely and thus their product and service mix displays significant similarities among each other. Like other banking institutions, VakıfBank offers its products and service to customers through its extensive branch network and alternative distribution channels such as ATM, internet, mobile and phone banking tools.

Whereas VakıfBank utilizes from primary data for building private customer data base, utilizes from secondary data in building commercial customer data base. VakıfBank is capable of collecting all sorts of information by means of its comprehensive customer data base. Information collected through customer

information forms relying on voluntary personal information declaration are transferred into the relevant data base.

On the first page of customer information forms, there are usually descriptive information about customer such as identity number and tax number. Customer information forms also include demographic information of customers. Detailed information about customers such as income level, marital status, profession, education level etc. are contained in the data base. In order to determine income statuses of bank customers, their profession, monthly earnings and properties owned are also contained in data base. Information concerning customer income level is exclusively important. Along recent years, banking institutons adopt another classification on the basis of their earnings and VIP-Private Banking services have emerged; and special branches offering private banking services have been launced lately.

Another data collection way for private customers is records individuals who work for real and legal commercial entities, members of the public institutions and organizations whose employees' salaries are paid by established banking system on the basis of bonus payment agreement. Moreover, this allows salary account holders' information associated with their current credit accounts from the data base of the Bureau of Credit Registry.

Partnership structure, income statement and financial statements of commercial customers are considered important by VakıfBank as well as information concerning the government incentives that they are awarded and their investment plans. Additionally, non-financial information, numbers of employees, assets, investment plans and variety of credit that they have been utilized so far, purchasing and sales preferences, foreign trade information such as export and import preferences of all commercial customers subject to credit rating are stored in data bases.

Besides, information such as payment capacity history of commercial customers, credit limits and risk – assurance levels, commercial registry logs, affiliated professional chambers, their position in their sector/industry, their competitive strength and etc. are followed. VakıfBank's own records, cash flows of customers, their wire transfers and swifts, financial balance sheets, their customers either suppliers or distributors, re-sellers and collection of checks and bond are considered most prominent information resources.

VakıfBank maintains an information pool referred as customer behavior module in which customers' expenditure, payment, cash flow, sector, gross sales etc. information kept logged. Additionally, there is a scoring system which evaluates customers' financial and non-financial information of customers in order to assess their credit rankings. This data base expands further through addition of new information available. Furthermore, each customer's file includes a micro-sized Swot Analysis concerning the relevant customer and their sector, whose information is collected through customer interview forms.

VakıfBank information system is capable of storing all information utilized in the industry. All sorts of information such as legislative regulations, decree and communications of the bank, customer proficiency, product matrixes, sector-wide analyses, risk analyses, customers' fundamental information (security and communication details etc.) are recorded into the data base. Information collected and stored in data bases is used in marketing process of bank products and services for VakıfBank's customers. For instance, branch sales divisions are notified about customers who could be potential for foreign trade products offered by Vakıfbank on the basis of data indicating a foreign income in that specific customer's income statement.

At the VakıfBank General Directorate, continuous research and development activities are implemented on data base applications and current system is enhanced in light of these efforts. As of 2014, owing to transition to the information system called as "VakıfBank Innovative Transformation" (VIT), new information entry into the current data base is governed by means of single software. Managers are of the opinion that information technology difference between VakıfBank and its competitors has now been closed by the VIT project. Data memory tree will be established through the information entered into the system over the time. This system also allows determining their product utility rates and profitability as well as the basic information about them.

At VakıfBank, in order to expand commercial customer population, district directorates and intelligence directorate conduct researches about newly founded businesses and new business areas and affiliations of current VakıfBank customers by means of especially branches and all marketing divisions. Any data available from chambers of commerce and industry, professional chambers, development agencies, and media are screened on continuous base. The intelligence department collaborates with media surveillance centers that collect current information from media and press. Company news, developments in sectors, and commodity price fluctuations are gathered and reported to the system.

Potential development strategies created in parallel to developments in sector are applied on companies continuing their active operations in the relevant sectors. During assessment of financial and credit rankings of companies, potation developments in the respective industry are taken into consideration. VakıfBank develops marketing strategies by focusing on sectors sensitive to new legal regulations. Especially, it concentrates on sectors that could be influenced by seasonal and regional differences. There are also specific researches on regions where VakıfBank's market share is relatively low and where new branches are opened. As a result of these researches, new products and promotion campaigns are organized.

Market share development status concerning the sectors and products focused on in the previous periods are investigated regularly. Moreover, comparative analyses on profitability, product sales and market share with respect

to competitors in the same sector are reported on continuous base. Strategies for preserving and developing position of VakıfBank in the market are developed in line with these reports. In case, the resulting development is not at satisfactory level, marketing strategies in effect are re-evaluated.

During setting marketing strategies, data stored in the information system is utilized; and the strategies adopted by competitors are also taken into consideration before deciding on the specific products and services to specific customers. MIS is utilized in both service and product differentiation and organization of promotion campaigns. For instance, information on professions of customers are sorted in terms of special days such as teachers, nurses and doctors so that relevant promotions could be organized and announced according to their communication preferences. Additionally, credit card spending data obtained from customers are employed in determination of consumption behaviors of private and commercial customers and to structure promotion campaign details.

Marketing departments, district directorates and all branches are actively participating in information collection process and they are constituents of an effective intelligence system. These divisions submit collected information to branch sales departments so as to conduct customer interviews. As a result of these interviews, the sales team provides feedback to the relevant data base about customers; thus, data base is continuously updated and expanded with new entries.

Again at VakıfBank, the information supplied by the Banking Coordination and Marketing Department at the Head Office to the district directorates concerning current or potential customers are assigned to Branch Portfolio Managers through the data base system. These assigned data is taken into consideration by Branch Portfolio Managers through the online system and these data reviewed once again during customer visits or phone interviews.

VakıfBank managers indicate that the most substantial problem is acquiring the accurate information for them. For banking operations, financial statements and account balances of customers are considered important since they are useful tools for assessing credibility of customers as well as determining which products are used by customers. Existence of off-the-book economy in Turkey prevents accessing accurate information about customers. Unreliable and useless information increase risk perception in the industry and hinders marketing efforts.

VakıfBank describes competitor term as follows: *"banks which has long history in the industry with similar characteristics in terms of number of customers and credit volume in the market"*. Managers indicated that customers have negative view of banks due to overcrowded banking industry and intensive marketing activities in the industry; and therefore, they sometimes experience difficulty in explaining themselves to customers. On the other hand, they think

that existence of VakıfBank in the market for long time is advantage and positive references of current customers reduce hindrances before gaining new customers.

Because of fragile structure of banking industry and substantial dynamic nature of economic developments, frequent updates are necessary on data base. VakıfBank evaluates adequacy and sufficiency of existing data bases continuously on periods of daily, weekly, monthly, quarterly, semi-annually, annually and 5-year subject to frequency and quality of information updates.

When the operation of the VakıfBank's MIS is assessed, it was observed that data collection and analysis criterions for all departments were not standardized or associated with a procedure. Non-standardized structure of information used by all marketing departments across the bank, difficulty in accessing these data, various formats of collected data result in different practices in interpretation and usage of information. Moreover, lack of necessary guidelines concerning update periods limits applicability of MIS across the VakıfBank in general.

Results

As conventional banking understanding is replaced by the modern banking practices in the banking industry, competition among banking institutions have intensified and accordingly they have tended to be more customer-oriented. Customer satisfaction and customer loyalty could be enhanced in banking institutions especially by determining customers' needs, expectation and offering relevant products and services for them. Information and technology have become inseparable competition factors in banking industry. In parallel to advancements in technology, bank institutions have made significant amounts of investment in technology to provide superior customer service by building up information systems. Advancements introduced by technological developments such as telephone and internet banking, ATM allowed customers to reach banking operations regardless of spatial and temporal boundaries.

In this study conducted on VakıfBank, one of the prominent actors in Turkish banking industry, it was found that the bank has recently increased its investments on required infrastructure for establishment of MIS. These investments are related with data collection on customers, data analysis, and determining marketing strategies in line with acquired information. Not only customer information, but also changes on legal regulations, declarations and decrees are followed and included into the system on continuous base. Owing to the data supplied by the MIS, service differentiation and promotional activities could be maintained in planned fashion.

The launch of VIT (VakıfBank Innovative Transformation) System in 2014 was remarkable step for VakıfBank in terms of efficiency of the information system, which assigned a single computer software interface for

data and information entry and access. Although introduction of this system closed the gap the difference between Vakıfbank and its competitors in terms of information technology, numbers of problems were encountered with application of the system.

Effective usage of bank information system is limited by fragile structure of the banking industry, risk undertaken by the banking industry and fluctuating variables in the sector. Existence of off-the-book economy in Turkey constitutes hindrance for acquiring accurate information about customers and elevates risk perception. Because of the competition in the industry, oppressive marketing efforts and negative attitudes of customers against them are considered as difficulties experienced in information collection process. VakıfBank succeeded to overcome these issues by means of acquired customer satisfaction level and customers' advises.

In order to maintain its competition advantage resulted from its public-subsidized nature, VakıfBank first need to invest in its technological infra-structure for further advancements. These investments should not be limited with the financial resources spared for system and software development, in-service training activities are required to be supported adequately in order to ensure their efficient usage. Since personnel training on information collection, analysis and interpretation would allow efficient usage of MIS.

It is substantially important to found "General Directorate of Information System" within the body of Head Office and outline authority and task of this department. Standard procedures regarding data collection, compilation and analysis are required to be introduced and put in practice in the shortest period of time. Standardized data fed by marketing departments is to be stored by a single department and be shared by whole organization so that all managers and personnel find opportunity to access them.

Finally, establishing MIS for an organization from the banking industry would not be adequate on its own. Such systems are expected to have high practicability; that is, they need to be systems allowing users to access desired information on momentarily. MIS system would also contribute into reduction of costs associated with marketing efforts and prevent poor marketing campaigns while managers gain leverage with valuable data stored and continuously updated in the system in their marketing decisions.

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