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KNOWLEDGE MANAGEMENT AND DATABASE MARKETING APPLICATIONS

BİLGİ YÖNETİMİ VE VERİTABANLI PAZARLAMA UYGULAMALARI

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ABSTRACT : The aim of this article is to learn whether database marketing is used as a tool of knowledge management, and to investigate its applications among Turkish ready to wear retailers. The retailers who use knowledge technologies can collect and turn data into useful information and knowledge, and then use them in database marketing systems. This study investigates whether ready to wear retailers have such database marketing systems, and how they set up and work these systems if they have one. There is no doubt that businesses in the information technologies sector would be interested in the topic and the results.

Key words : Knowledge, knowledge management, data, information, database marketing, data warehouse ready to wear retailing.

***ÖZET** : Bu makalenin amacı veritabanlı pazarlamanın bilgi yönetimi aracı olarak kullanılıp kullanılamayacağını araştırmak ve Türk hazır giyim endüstrisindeki perakendecilikle ilgili uygulamaları öğrenmektir. Bilgi teknolojilerini kullanan perakendeciler bazı verileri topladıktan sonra onları kendilerine yararlı enformasyonlara ve bigilere dönüştürerek veritabanlı pazarlama sistemlerini kullanabilirler. Bu araştırmada hazır giyim perakendecilerinin veritabanlı pazarlama sistemine sahip olup olmadıklarını ve sahiplerse bu sistemi nasıl kurup çalıştırdıkları incelenmektedir. Bilgi teknolojileri alanında çalışan işletmelerin bu araştırma konusu ve sonuçlarına ilgi gösterecekleri kuşkusuzdur.*

***Anahtar Kelimeler** : Bilgi, bilgi yönetimi, veri, enformasyon, veritabanlı paarlama, hazır giyim perakendeciliği.*

I. Introduction

In the competitive world of today, firms are increasingly realizing the importance of knowledge management. Knowledge is an essential component for gaining competitive advantage. Organizations with knowledge management are freed from walls that keep them away from either departmental or environmental communication and knowledge sharing. Knowledge causes a common organizational culture, strategies and actions throughout the organization. Knowledge also causes quick learning of and adaptation to changes in the environment of a company. The first step of gaining knowledge is gathering data from internal and external sources. Then these data are classified and processed to turn into information. And information is then transformed into knowledge upon which organizational strategies, decisions and actions are built. Everyone in the organization from first level managers to top management is involved in the process of turning data into knowledge. Knowledge is continuously changing as organizations and environment change. In order to be competitive, organizations should keep up with changing knowledge and act upon it.

Database marketing is a way of knowledge management. This time it is customer knowledge that everything is built upon. In the changing conditions of marketing today, marketers see it essential to know their customer base and plan and make marketing strategies and actions based upon this knowledge. This is called database marketing. Customer data are transformed into customer information kept in a marketing database. Customer information is analyzed, discussed, and shared throughout the organization and marketing strategies and applications occur based on the knowledge formed.

This paper first introduces the concepts of knowledge and knowledge management, and datbase marketing in detail. Then it provides the results of a study conducted among ready to wear retailers in Istanbul, Turkey to learn about whether they have such database marketing systems, and how they set up and work these systems if they have one.

II. Data, Information, and Knowledge

Data is the first source of knowledge. Data form information. After the Information is processed, it makes up knowledge that manager uses in decision-making, planning and operations. The process related to this is summarized in the Figure-1 below.

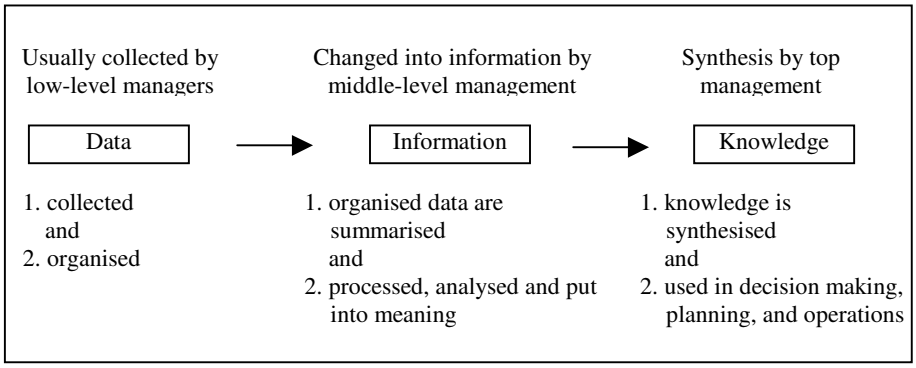

Figure-1. Process of Obtaining Knowledge

Data are composed of numbers, records, symbols, and the like about real things. Data are usually gained from two sources. One is environmental sources. In other words, data are gained from events or people in the general and close environment that organizations work in.

The second source is the records or reports kept on the activities of the firm itself (Figure-2). We can classify data into two groups as external and internal data. Unless they are collected, followed up, organised and grouped together, data would not gain meaning and would mislead managers.

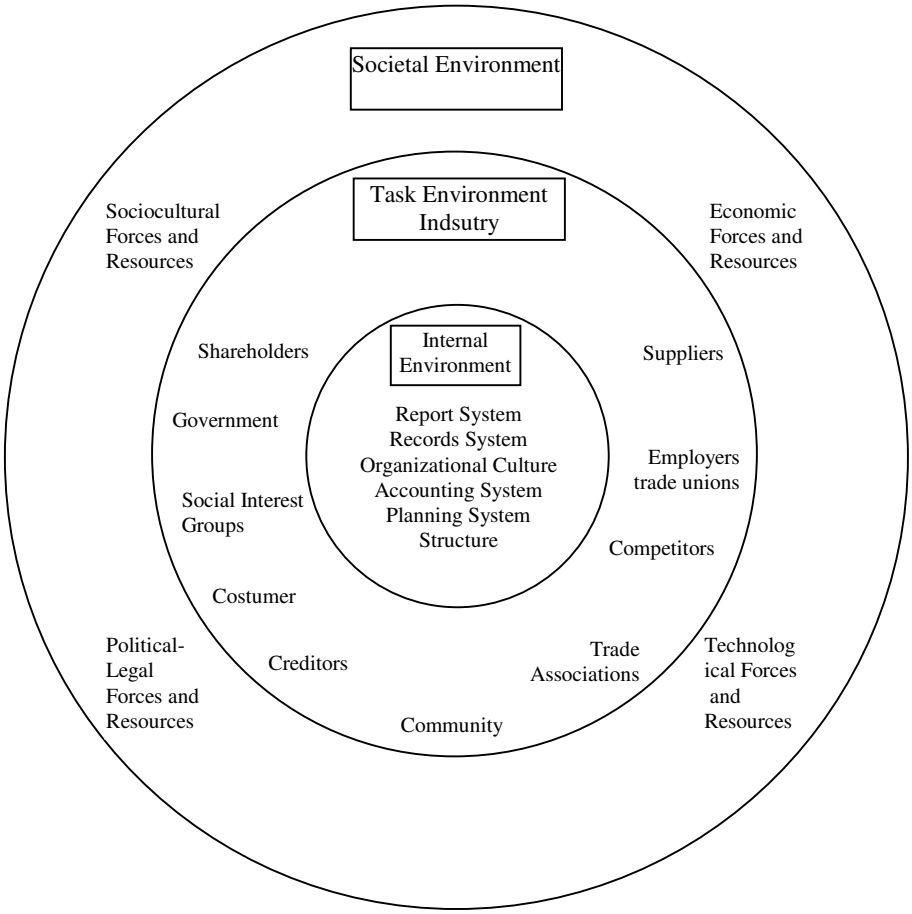

Figure-2. General and Close Environment that Data are Gained from
(Source : Wheelen T. L. and Hunger, J. D. (2000) *Strategic Management and Business Policy*, 7th ed. New Jersey, Prentice-Hall.

Today, with the help of technological tools, organizations collect internal and external data with regard to related departments and the place they would be used. These data are then transferred to marketing, production and operations, accounting and finance, human resources, and research and development departments in a classified way. It should be kept in mind that organizations must be fed with data from the environment either in which they operate, compete or in which they achieve missions.

Information means forming and shaping these data. Organized data are transformed into a meaningful form from which comments or meanings can be derived either by the help of a computer or manually (Nonaka and Takeuchi, 1994). Information has been derived from the word “formation”. The point of view, inner world, appearance, and as a result behaviour and attitudes of people change with information that they gain. Data collected are turned into information by giving it a meaning. Information is important for explaining objects, situations and events and giving them a meaning. Information gains an effective message identity for the people who make the transfer and for people to whom the information is sent.

Prusak and Davenport (1998) explain the main methods used to turn data into information as follows :

1. Explaining Quality and Concept : Presenting for what aim, that data would be used to.
2. Classifying Data : Separating data according to main characteristics and various qualities and giving them meaning.
3. Quantitative and Statistical Evaluation : Giving data meaning by analyzing data with quantitative and statistical methods and forecasting for the future
4. Confirmation : Examining data, cleaning them from errors, and avoiding possible mistakes.
5. Intensification : Summarizing a great number of data and making a short summary.

Knowledge constitutes a deeper, richer and wider meaning than information for the managers. Data are transformed into information when they are processed, synthesised and shared by top level managers who make decisions in the organizations. Knowledge occurs as different and varying information from various sources come together in a meaningful way. This knowledge is used in organizational planning and operations. Knowledge provides a point of view and intention for decision making and acting. Knowledge moves people and managers close to action.

Information is an important tool in gaining and structuring knowledge. Information adds into knowledge. Knowledge formation occurs when information from various sources and times are shared, discussed, and interpreted by individuals and managers who are responsible. It can be a long and time taking process. However, it forms a strong belief, attitude, and determination.

It is possible to explain the process of turning information into knowledge as follows (Prusak and Davenport, 1998).

1. Comparing : Information is a continuos message movement from yesterday to today, from today to tomorrow. Because of this, the person receiving a message compares it to old messages received and decides to put it into knowledge if s/he observes a change.
2. Pulling Results : Influencing people in decision making and operations or being used by people in decisions and operations transforms information into knowledge.
3. Bonding : Forming a bond between information from different sources.
4. Sharing Information with others and evaluating : Taking opinion of others for interpretation of the coming information.

These four transformation processes are used one by one or together as a synthesis to reach information. Data and information are raw. Turning them into action occurs after knowledge transformation processes. In other words, knowledge causes necessary decisions to be taken and later puts these decisions into action.

Knowledge is a concept that is vague, hard to be explained or put into words. One knows more than s/he can express, but it is all s/he can tell. Knowledge is an interpretation of information that changes from one person to another. Its influence on each person is different but it incorporates the ability to get people into action. For this reason, it is important to work as a learning organization to avoid interpretation errors and to complete missing information. It is also important to

share the information and provide the means for common reach to information in order to open the way for idea sharing in an organization. This would lead to a common organizational culture in individual and organizational behaviour, a decision making, planning and operating platform that is purified from errors.

Some knowledge is natural and practical. Laws of physics and nature, mathematical and geometrical theorems, postulates, actions are examples of this kind of knowledge which are called “static based knowledge”. However, some knowledge is of social quality and their data and information continuously changes in the light of environmental changes and improvements, competition and innovations. This is called “dynamic variable knowledge”. This kind of knowledge continuously changes with internal and external information, and affect decision making, planning and operation forms and cause changes.

III. Knowledge in Organizations

Knowledge is formed as a result of long and tiring research. It is collected, and then discussed by sharing it to others and lead to individual and organizational decisions, plans, and actions. According to Sveiby (1997) , organizational knowledge can be grouped into four.

1. Subjective- Disclosed Knowledge- It is knowledge that is reached or built individually or as a group, but not expressed to others outside the group.
2. Action Oriented Knowledge- it is knowledge that is felt and comprehended by an individual or members of a group and that gets people into action.
3. Regulation Supported Knowledge- There is regulations that help the formation of knowledge. These regulations, in the form of procedures, play an important role in individual gaining and improving talents and experiences.
4. Continuously Changing Knowledge- Knowledge that is turned into symbols and languages is spread, shared, criticised, negotiated and also increased. Known, but unexpressed knowledge is always more than what is expressed. In other words, there is a lot of knowledge under the iceberg, and it is hidden and untold. This hidden knowledge unites with new knowledge gained in time and causes a continuous change in the existing knowledge. This is why it is called continuously changed information.

There are several ways for forming knowledge in organizations. Organizations form their own knowledge in the first place. Then they transfer knowledge from outside sources if needed. In both processes of knowledge formation, there is need for knowledge connections. The so-called environmental knowledge connections are customers, suppliers, employee/union organizations, universities, competitors, creditors and similar environmental elements. Strong knowledge connections help organizations gain expertise and competitive advantage over competitors.

The management of knowledge connections in the external environment is composed of activities such as formation, learning, sharing, and controlling of knowledge. Managers decide what kind of knowledge should flow in or out of the organization. And when and how it should flow for this reason, the walls in between the organizational departments and the walls between organizations and external environment must be removed. This would cause organizations to be in harmony with their external environment and with customer expectations and be more innovative. In other words, organizations that want to focus into future, would reach knowledge necessary to accomplish their long-term strategic aims and targets. In a

few years, they would understand what knowledge is necessary to gain competitive advantage against competitors and try to obtain this knowledge.

For survival and development, organizations need to be innovative in products, processes, and costs in the global competitive world of today. Being innovative in an environment, where knowledge is continuously up to date, depends on continuously renewing and reforming knowledge. Renewed knowledge is the result of cooperation in the form of team spirit among departments and strong relations and cooperation of the organization with knowledge sources and the market.

Hierarchical structure of organizations plays an important role in knowledge formation. Low-level managers and employees responsible for operations are people who collect and store data in knowledge formation process. Middle level managers are responsible for classifying and coding data and transferring them to top management in the form of information. Knowledge managers and top management subject this information to certain combinations and synthesis so that knowledge necessary to move on is achieved.

In a hierarchical organization, the first thing to do is to determine which data are needed and into which information and knowledge these data would be turned. This is called knowledge vision. For this process, it is necessary to determine data operators (data collectors) and supervisors (responsible for observation) in the low level management, information engineers (data translators) in middle level management, and knowledge managers that form knowledge and top management that these knowledge managers consult. This is called knowledge team formation. It is important not to forget that gained knowledge can be used in new strategy formulation, new product development, product improvement, and knowledge sharing in the national and global environment.

It is also important to note that knowledge formed would be a guide in reforming or examining politics, organizational chart and process, organizational culture, leadership forms in organizations. In these types of organizations, all management levels are examined under the light of knowledge formed and are adapted to the new knowledge environment. Sometimes, it is expected from organizations to act proactively and turn the situation to their benefit thinking of the changes in the future.

In short, in order to be knowledge forming organizations, firms should continuously collect internal and external data, turn them into information first and form knowledge and use this knowledge in decision making and planning mechanism. This way, they can reach current and daily knowledge dynamically and form a knowledge-based organization. Confronting with change, adapting to change, putting forward new technologies, products and services requires a knowledge-based organization. This is as a must. Database marketing is one of the tools that knowledge based organizations can use to confront with changing dynamics of the market and keep customer loyalty. The next section of this paper deals with explaining database marketing touching upon changes in marketing.

IV. Database Marketing

Up to this point, the essentials of knowledge management have been touched upon. In this section the link of information, knowledge and marketing will be formed and database marketing will be explained in detail.

Today's business environment requires people who can work with, manipulate, and assimilate information and knowledge since the business world revolves around information and knowledge (Haag and Keen, 1996). Therefore, the power is in the hands of those with IT, information, and knowledge. IT can be defined as the acquisition, processing, storage, presentation and transmission of information in all of its forms (Fletcher, 1995). IT has the greatest influence on the global workplace by making it possible to collect, process, and transmit information at breathtaking speed and declining costs (Hanna, Guy and Arnold, 1995). Companies first put in place an IT infrastructure and then go beyond the technology to view the management of information itself as a way to gain competitive advantage. In the information-intensive environment, the source of long and sustainable competitive advantage lies in the management of the overall set of relations between the firm and its environment. In other words, since the relations are developed through the pattern of exchanges in which the firm is involved, the source of competitive advantage lies in the management of the firm's information (Glazer, 1991). IT increases the efficiency and competitiveness of internal tasks of marketing management by managing information through information systems and specialised software packages. It is changing the ways in which firms operate and trade (Fletcher, 1995).

Kotler (1999) says that marketing managers need information in carrying out marketing analysis, planning, implementation and control. Knowledge of existing and potential markets, business trends, and competitors is essential to the success and effectiveness of any marketing effort. Accordingly, it can be said that today's marketers are realising the power of information and knowledge for improving their marketing efforts. "Know thy customer and communicate with him or her based on what you know" is the principle that represents the future of marketing, no matter what products or services a company markets (Jackson and Wang, 1994). Customer dialogue and relationship marketing are the new trends in marketing. The communication between the company and the customer has taken the form of a dialogue recently, leading to the concept of relationship marketing (Fletcher, 1995). Relationship marketing involves creating, maintaining and enhancing strong relationships with customers and other stakeholders. The orientation is toward the long term. The goal is to deliver long-term value to the customers. The measure of success is long-tem customer loyalty (Kotler, 1999).

A genuine paradigm shift occurred in marketing, from an exchange, transactional focus to a relational, one to one, customer oriented focus (Tzokas and Saren, 2000). The old paradigm, a system of mass production, mass media, and mass marketing was being replaced by a totally new paradigm, a one-to-one economic system. This 1:1 future is characterised by customised production, individually addressable media, and 1:1 marketing, totally changing the rules of business competition and growth (Batra, Deere & Ratner, 1998). The future of marketing depends on recognizing the individuality of customers. Marketers need to know more about their customers. IT intervenes at this point since these goals can be achieved through the affective use of information technology to understand customer preferences, respond to customer queries and sharing that information throughout the organization (Wreden, 1999).

Companies are relying increasingly on IT and computers to store, index, and analyze more and more information about their customers (Rapp and Collins, 1987). The data is available to any marketer who can afford it or has the technology to store and manipulate it. Until very recently, the task of organizing and using this kind of data was nearly impossible. Today, however, database technology provides a solution.

The database technology and applications allow marketers to tap into real information about their customers and prospects (Jackson and Wang, 1994). Accordingly, it can be said that in an age in which marketing battles are won or lost not on brains or creativity or even experience, but on the power of information and knowledge, database marketing is a tool that gives the marketer an edge over competitors. For marketers with the vision to recognise the future and have the spirit to move toward it, database marketing is one of the tools that can be used to communicate and build long-term relationships on a one-to-one basis with millions of constantly changing immensely varied consumers. Those who use information, IT, and database marketing are several steps ahead of the game, and will lead the others into the future of marketing (Jackson and Wang, 1994).

The changes that took place in the marketing environment, when combined with technology has created an opportunity for marketers to enter into a new era of sophistication in understanding customers and communicating with them based upon this knowledge. The merge of change in marketing philosophy and technology resulted in the introduction of customer database and the rise of database marketing. With the changing situation in the marketing environment that has caused marketers to focus their resources on the customer as an individual, a need for marketers to acquire, develop, and tap into a database of in-depth information about their customers to improve their marketing efforts using that knowledge has occurred. Database marketing resides on this newfound ability to capture, manage and use large volumes of marketing data about customers (Jackson and Wang, 1994). Database marketing enables marketers to step into roles of "information editors" by applying meaning to the customer data and convert customer data into important knowledge (Palmquist and Ketola, 1999). As a company becomes more comfortable with its customer information and uses it to solve its business problems, it starts the process of re-inventing itself around the needs, preferences, and values of its customers. This shifts customer information that is used in making all business decisions from the immediate tactical plans to information for longer-term strategic or capital expenditure decisions. Ultimately, the customer information shapes organisational structure, performance measures and compensation as a company drives its strategies around achieving relationship with customers and acquiring their loyalty (Letting Customers, 2000).

There are different definitions of database marketing. A good definition of database marketing is given by Rapp and Collins (1987) as 'the ability to use the vast potential of today's computer and telecommunication technology in driving customer-oriented programs in a personalised, articulated, and cost-effective way.' Database marketing strategy is based on the premise that not all customers or prospects are alike and that by gathering, maintaining and analysing detailed information about customers or prospects, marketers can modify their marketing strategies accordingly (Rowe, 1989).

There are six steps in database marketing. The first step is identifying customers and prospects. After this identification, then a marketing database is formed consisting of data about customers and prospects. Data are collected from internal and external sources, classified, confirmed and summarized into customer information. Later this customer information is analyzed, processed and given meaning by the use of IT and computer programs. In short, it can be said that information is transformed into knowledge. Acting upon this customer knowledge derived from the customer marketing database, database marketing applications are conducted. All of these marketing

activities are aimed at building long-term relationship with customers and securing customer loyalty. Figure- 3 presents a simple model of how customer data are collected by low-level managers who are closer to customers and the market, how customer data are transformed into information and how customer information is used to shape marketing strategies and decisions that later turn into marketing activities.

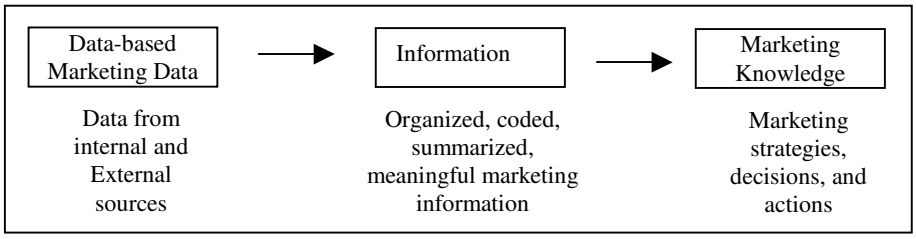

Figure-3. Database Marketing Process

The next section of this paper consists of an exploratory research based on this model of database marketing process that is developed by the researchers.

V. Research Design and Methodology

The purpose of this part of the study was to explore whether database marketing applications were conducted by Turkish ready to wear retailers. Related to the purpose of the study, the retailers' involvement with IT, the kind of information they collect from customers and sources of this information and their database marketing process were questioned.

V. 1. Research Design

Firms in Turkish ready to wear retail sector were contacted. The research here, was divided into two parts. The first part was a telephone interview with the firms to find out whether they conduct database marketing. And the second part was getting into face to face contact with the firms, which conduct database marketing. Both the telephone interview and the questionnaire were designed to be exploratory and qualitative.

V.2. The Sample

The target population for the pilot study and the research was ready to wear retailers. The extent was İstanbul. The list of ready to wear retailers in İstanbul, given by the Turkish Council of Shopping Centers and Retailers (Alışveriş Merkezleri ve Parakendeciler Derneği) was taken as the population frame. The list consisted of 81 retailers. The sampling unit in this study was managers who were responsible for database marketing process in the company since they were thought to be the most knowledgable on the topic.

The full population was phoned to learn if they conducted database marketing. In return, however, 30 of the retailers could not be contacted because of the inconsistency between the list of telephone numbers provided by Turkish Council of Shopping Centers and Retailers and the actual telephone numbers of the retailers. Also, some of the retailers did not have a telephone number provided on the list. One of the retailers did not want to cooperate in the research. Out of 81 retailers, 50 of them could be contacted. Out of these 50 retailers, 42 of them were found to be not conducting database marketing applications. These retailers participated in the telephone interview though. With remaining eight of the retailers, which conducted database marketing,

appointments were arranged for in-depth interview and they were interviewed. The sampling method for the exploratory research is shown in Table 1.

Table 1. Sampling Method

	Applicators of database marketing	Non-applicators of database marketing	Number of retailers that could not be contacted	TOTAL
Number of Retailers Contacted	8	42		50
Number of Retailers That Could Not Be Contacted			31	31
TOTAL	8	42	31	81

VI. Findings

50 different managers in 50 different Turkish ready to wear retailers were contacted by telephone and asked if they applied database marketing. 49 of these managers did not know the meaning of database marketing at all. Only one of them did not ask for an explanation. The meaning of database marketing was explained to the rest of the respondents. 42 of the respondents said that they were not conducting database marketing. With eight of the respondents, who said that they conducted database marketing, structured in-depth interviews were carried on. Telephone interviews were conducted with the remaining 42 respondents.

VI. 1. Findings of Telephone Interview

Out of the 42 respondents telephone interviewed, 24 said that they were collecting customer information and one said that they were planning to collect customer information in 2001. Companies collected customer information from store credit card applications, customer cards at the counters, questionnaires filled and knowledge and observation of salespeople. 12 of the retailers had a store credit card and kept customer information provided during card application. Six had customer cards at the counters and had best customers fill these cards. Two collected information through questionnaires. Out of these two retailers, one had in-store questionnaire forms and tried to have customers fill them. The other had online questionnaire forms filled by the visitors of their store Web site. Ten of the retailers stored information about customers based on the observation and knowledge of the store salespeople. The findings are summarized in Table 2.

Table 2. Sources of Customer Information

Sources of Information	Number of Retailers
Credit Card Application Forms	12
Customer Cards at Counters	6
Questionnaires	2
Observation and Knowledge of Store Salespeople	10

12 of the retailers, which also had store credit cards, had a central customer database containing information about store credit card owner customers at the headquarters. The remaining 12 retailers kept customer information only in the related stores.

None of the retailers analysed the customer data at hand either alone or with other inter and outside company data. Among the reasons cited for not analysing customer data are lack of infrastructure, and lack of will and belief in the need for analysis. Six retailers used customer information only for keeping track of their credit history. The

remaining 18 retailers used customer information for direct marketing purposes. On their birthdays, mother's day, anniversaries and other special days, customers were sent greetings. They were informed of sales or promotions either by mail or by telephone. Sometimes, they were sent catalogues, presents and invitations to seasonal openings. The findings are summarized in Table 3.

Table 3. Use of Customer Information

Use of Customer Information	Number of Retailers
Analysis	-
Only for Tracking Credit History	6
Direct Mail	18

Six of the retailers were at the point of incorporating software systems to build customer databases that would be used for statistical analysis. They were planning to use the results of the analysis in their marketing plans. All of them had outsourced the database building step to software companies. Meanwhile they were trying to collect customer information. None of the remaining retailers had a plan of this kind at the moment.

VI. 2. Findings of In-Depth Interview

As told earlier, with eight of the retailers which conducted database marketing, structured in-depth interviews were carried on. The findings of these interviews are presented in four sections in accordance with the four sections of the interview. First characteristics of the retailers are detailed. Then findings on their acquaintance with IT, the kind and source of customer information they collect, their database marketing process are explained.

VI. 2. 1. Characteristics of the Retailers

This section puts forward the characteristics of the Turkish ready to wear retailers that conducted database marketing. The managers were asked which type of clothing the retailers sold. The answers presented the following. Four of the retailers sold mixed clothes for women, men and children. Three of the retailers sold mixed clothes for both men and women, while one of them sold clothes only for women. The retailers were asked for how many years they had been in the ready to wear sector. The oldest of the retailers has been active in ready to wear retailing sector for 50 years. The next oldest retailer has been in the sector for 38 years. Two others have been in the sector for 29 years and 17 years respectively. Another retailer started operations in 1999 whereas the youngest retailer began operations in April 2000.

Managers were asked to rate their size according to others in the market. Five of them rated themselves as "big" while the remaining three rated themselves as "medium". They were asked whether there were any chains or branches. All, but one of the retailers had chain stores with varying numbers. The biggest number of chains was 35. The second biggest number was 25. Two retailers had 13 and 12 chains respectively. One had 10 chains. Two had less than 10 number of chains, seven and five in order. The managers also rated the level of competition that they felt in the sector. Six told that they felt high level of competition whereas one felt medium level of competition. Only one told that the company was the only example and special in the sector because of its product line so the level of competition was low. They were asked whether there was any foreign investment, but none had foreign investments.

They are asked the proportion of their marketing budget to their turnover. However, none of the managers knew the proportion of their marketing budget to the turnover.

VI.2. 3. The Retailers' Acquaintance with IT

All of the retailers gave the same answers in this section. They were asked whether they looked positively to information and information technology. All of the retailers told that they looked positively to information and information technology. Again, they told me that they all used information and IT. To the question asking whether they collected customer information, they all answered positively.

VI.2. 4. Kind of Customer Information Collected and Its Source

The retailers were asked what type of customer information they collected. All of the retailers collected name and surname, address, telephone number, gender and age of their customers. Four retailers learnt the period that customers stayed in the same address. Four retailers collected the identity number of the customers. Seven retailers collected education level and marital status information about their customers. Seven retailers collected customer occupation information. One retailer collected information about number of people lived with. Two retailers collected information on number of houses owned. Three retailers collected geodemographic information. Four retailers collected credit information of their customers. Three retailers collected information on categorical and similar and complementary product usage of customers. Four retailers kept information about communication channels preferred.

Retailers said that they could collect information about recency, frequency and monetary value of transactions made in the company from the billing department. Two retailers collected information on reasons of shopping. Six retailers collected information on shopping and buying habits of their customers. Six retailers also kept information about customer expectations of products, satisfaction from products bought from store, and unmet needs. Three retailers said that they collected this information by face to face interaction with customers. One retailer kept notebooks in the stores to write down wants, needs and complaints of customers. Another retailer trusted store managers and the salespeople in getting this information. All had these expectations, unmet needs, and complaints of customers brought up in periodical meetings and tried to take action to correct the situation. Two retailers also collected information on attitude towards the store and competitive stores.

The retailers were also asked what sources of information that they used. All the retailers used product returns and customer complaints as sources of information. Seven retailers used store card application forms as source of information. Six retailers used billing and accounting information. Four retailers used information gained by tracking reactions to promotions. Three retailers used customer satisfaction reports as sources of information. Five retailers used customer service reports and questionnaires. Only three used online questionnaires as a source of information. One retailer had plans about using online questionnaires. Three retailers used e-mails as sources of information. Frequency of Internet site visits and time spent there were also used as sources of information. Only one retailer used call centres as sources of information. Three retailers used information from third party sources. Credit card companies, Public Relations (PR) firms, alumni offices and agents were examples of sources that they got names and information about potential customers.

VI. 2. 5. Database Marketing Process of Retailers

The retailers were asked whether they had a marketing database. The concept of marketing database was explained as collecting customer information on a database where everyone in the company can reach with the help of a computer program. All of the retailers had a marketing database where they kept customer information. Besides a marketing database, the retailers were also asked whether they had a data warehouse. A data warehouse was defined as pulling together operational, past and other internal and external information in the same place and opening it up for use of all company members. However, not all retailers had a data warehouse. Four retailers said that they had a data warehouse in use. One was planning to outsource the building of a data warehouse in the near future. Another retailer told that there was a data warehouse, but it was not very active. One retailer said that information was not collected in one place, but answers to questions could be obtained.

The retailers were asked how frequently they conducted database marketing and the reason for doing so. They were to check out alternative ideas for the reason. Database marketing was defined as keeping information about actual and potential customers on a marketing database by using today's computer technology, and then having marketing applications based on analysis of these information. Six retailers told the researchers that they always conducted database marketing applications. Two retailers told the researchers that they frequently had database marketing applications. The common answer given to why they conducted database marketing applications was their change in their marketing view. One retailer told the researchers that their belief in one-to-one marketing was important in this change. Four retailers also cited customer demand as a reason. Three retailers took outside consultancy in applying database marketing. One retailer also cited the use of database marketing by competitive retailers as a reason. One retailer told the researchers that it was hard to conduct database marketing in the full sense because of inadequacy of infrastructure and lack of personnel with adequate knowledge. The customer information was collected to give some idea on customers. Careful collection of customer information was not possible.

The retailers were asked what they thought database marketing applications would add to their store. They were to choose among alternative ideas. All of the retailers believed that database marketing would increase their sales, induce customer loyalty, and help find new customers. Seven retailers thought that they would target key customers by conducting database marketing. Six retailers also believed that database marketing would help them react against competition. Six retailers thought that with database marketing they could reward their customers.

The retailers were asked about the person who gave the decision of database marketing. In seven of the retailers, it was the top management that gave the decision to move into database marketing. In one retailer, a team which was behind the whole concept of the store gave the decision. The retailers were asked whether they had database marketing department and database marketing director. None of the retailers had either a database marketing department or a database marketing director. The departments in charge of database marketing were sales, marketing, categorical management, MIS and marketing, customer relations departments in different retailers.

Finally, in the last question, the retailers told us which departments were involved in which stage of database marketing process. In determining actual and potential customers, marketing departments were in charge in three retailers. Research and development departments were involved in determining actual and potential

customers in four retailers. Sales departments were active in three retailers. Sales departments in two retailers helped in determining actual and potential customers. Agents were involved in determining actual and potential customers in one retailer. A team behind the concept of giving consultancy, product manager and a PR firm helped one retailer to find actual and potential customers.

In building the marketing database, IT departments were responsible in three retailers. Marketing departments were involved in this step in four of the retailers. Sales departments took part in building the marketing database in three retailers. Production and accounting and finance departments were involved in the process in two retailers. After sales department, research and development department helped building the marketing database in one retailer. In one retailer, the product manager and general manager were involved in the process. In another retailer, credit service department was used. Two retailers used outside sources. One retailer used a team behind the concept giving consultancy, a PR firm. Another retailer received help from a credit card company.

In improving database with information, marketing departments were involved in three retailers. In two retailers, IT departments were used. Information from sales departments was used to improve the databases in three retailers. Research and development departments were involved in this step of the process in two retailers. Production departments helped to improve the database with information in two of the retailers. One retailer used information from accounting and finance and after sales departments. One retailer used information from credit service department. Another retailer used the help of product manager and the general manager. Two retailers used outside help. One used information provided from a credit card company, and the other used a team behind the concept giving consultancy and a PR firm.

In analysing the information on the database, IT and sales departments were involved in two of the retailers. In three retailers, marketing departments were involved in this step of the process. Accounting and finance department was used in one retailer. Purchasing department was active in analysis in one retailer. In one retailer, categorical management department helped the analysis. Customer relations was the department responsible for analysing customer information in one retailer. In an another retailer, product manager and general manager performed the analysis. In one retailer, all of the departments were equally involved in analysing customer data.

In four retailers, marketing departments conducted database marketing applications. Sales departments were involved in database marketing applications in two retailers. In one retailer, categorical management department was also involved in database marketing applications. In another retailer, accounting and finance department was also active. Credit service department applied database marketing in one retailer. Customer relations department was responsible for database marketing in another retailer. One retailer used research and development department and the help of a PR firm in conducting database marketing activities.

In three retailers, it was the marketing department that analysed the total success of the database marketing process. In two retailers, IT departments took part in the analysis. Sales departments were active in analysing the total success in three retailers. Accounting and finance departments helped the analysis in two retailers. Purchasing department was involved in this step of the process in one retailer. Top management of one retailer was responsible for analysing the total success. Three retailers took outside help in analysis. A PR firm helped one retailer, whereas a credit cards company helped another in the analysis.

VII. Conclusion

Today's business environment is built upon the effective collection, management, and usage of knowledge. Firms gain their competitive advantage throughout knowledge and knowledge management. Database marketing , where everything is built upon customer knowledge, is one important tool of knowledge management. This paper tried to find out whether database marketing is applied in Turkish ready to wear retail sector. The findings suggested important results.

First of all, database marketing was a new concept for Turkish ready to wear retailers. Other than one retailer who overheard the concept in a conference attended, no other retailer was familiar with the concept even if they stated that they applied database marketing after the concept was told in detail.

Findings also suggested that database marketing was not a frequently used method among Turkish ready to wear retailers. Some retailers were clearly unaware of customer data, database or database marketing concepts. They did not even collect customer information. On the other hand, some collected customer information, but did not classify or process what they had collected other than direct marketing purposes. In other words, these retailers did not transform customer information to customer knowledge to build strategies and act upon. Only retailers, who had a store credit card kept customer information on a central database. Other retailers that collected customer information kept this information in stores where they are collected. This shows that retailers had not removed organizational walls in between since they had no means to share each other's information. There was no common organizational knowledge about customers.

Although there were only a few applicators of database marketing, there were those retailers which were seriously thinking of going into the process. This showed that there was an awakening group of retailers who began to understand the importance of knowledge. Among applicators of database marketing, it was clear that all agreed on the idea that information and IT usage was necessary and important. They all collected customer information in detail from both internal and external sources. Change in their marketing view induced them to apply database marketing. It can be said that changes taking place in the market and effects of these changes on retailers as a change in marketing view coincided with database marketing applications. They all decided to apply database marketing to induce customer loyalty, increase sales, and find new customers.

There has been a top to down approach in decision to database marketing in all but one of the retailers. The organization decided to move into the process with the inducement of the top management. However, in one retailer a team decided it. There were no database departments in any of the retailers. Database marketing was not thought of as separate activity but as a joint activity of many departments. Different departments in the organization carried on database marketing activities. Different departments were also involved in different stages of database marketing. The whole organization was committed to database marketing in all retailers. The ideas presented so far represented the results of the research in terms of retailers. The research also had implications for IT companies and researchers.

Turkish ready to wear retailers were at the stage of slowly understanding the need for database marketing applications and moving on to the process. There would be a

demand in the market for software tools that are necessary for employing database marketing. Technological solution provider firms can and should speed up the process by making more retailers aware of the merits of database marketing by educating and convincing retailers to apply database marketing. In one way or another, the future of the technological solution market would see a rising demand in the future.

For the researchers, this paper was a start up. Database marketing may be said to be in the introduction phase of its life cycle in Turkey. It promises more opportunities for research in the future when the process moves into maturity stage. This paper hopefully explored the way for other researchers.

VII. References

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