THE IMPORTANCE OF SUPPLY CHAIN MANAGEMENT IN CHAIN STORES IN THE RETAIL INDUSTRY AND THE IMPACT ON SERVICE QUALITY
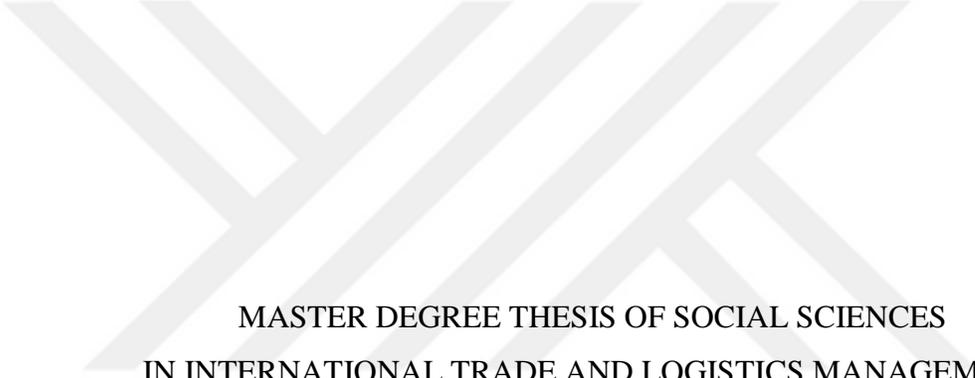
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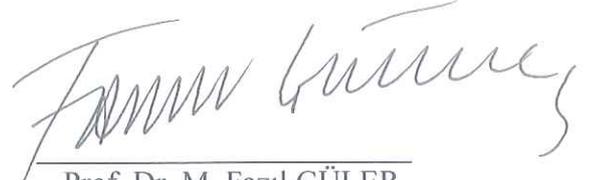THE RETAIL INDUSTRY AND THE IMPACT ON SERVICE QUALITY

BY

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MASTER DEGREE THESIS OF SOCIAL SCIENCES
IN INTERNATIONAL TRADE AND LOGISTICS MANAGEMENT

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This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Social Science.
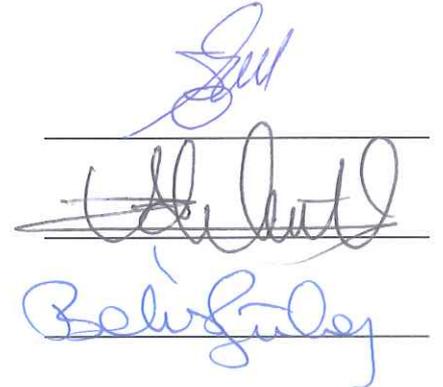
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ABSTRACT

Retailing is a dynamic sector that offers all kind of products and services to consumers. The industry which includes different types of business has an important position in the supply chain. Chain stores have an important position with food and non-food retailing. The stores more advantageous than small groceries. Chain stores have an advantages in competition because purchased amount big and because of amount they are cheaper to buy. On the other hand everything must do in the same time in all stores. The organization possible with supply chain management. And customers are more selective in chain stores; they all want to find what are wanted.

The ability of retail businesses to better serve their customers and to meet their expectations is dependent on the product supplied by the retail supplier and the logistics and the corporate activities. These support components play a determinant role in the relationship between the supplier and the retailers. While some of the behavior of the suppliers constitutes added value providing continuity of relationship with the retailer companies, others have been observed to have no effect.

To add value to the chain retail shops, some changes have been done in some shelves, some products display quantity, the outlook have changed (the market sign). After these changes, 29 stores were selected from different locations and the previous and subsequent statuses of the stores were analyzed with statistically. On the other hand tested the image of the stores in the eyes of the customers either with data analyzing and the survey have been done for it.

The purpose of this study is; analytical work based on prediction, helping organizations to take more effective actions, marketing activities, sales, and supply chains and so on. It is to prove that many different areas are helping to augment at significant levels.

All about for just happy customer and it just come from good service quality, if the stores have smiley customer, it does mean has good supply chain management and good service quality.

Keywords: Supply chain management in chain stores, service quality in chain stores, the relation with supply chain and service quality.

ÖZET

Perakendecilik, tüketicilere geniş ürün yelpazesi ve hizmetler sunan dinamik bir sektördür. Farklı işletme türlerini içeren bu sektör, tedarik zinciri içerisinde önemli bir yere sahiptir. Zincir mağazaları, gıda ve gıda dışı perakendecilik ile bu geniş yelpazede önemli bir yere sahiptir. Mağazalar, küçük bakkala daha avantajlı, daha organizedir. Rekabet ilk sırada gelirler çünkü ürünler büyük miktarda satın alınır bundan daha ucuzdur. Öte yandan her şey aynı anda tüm mağazalarda yapılmalıdır. Bu organizasyonlar tedarik zinciri yönetimi ile mümkün hale gelebiliyor. Müşteriler zincir mağazalarda daha seçicidir; hepsi istediklerini bulmak istiyor.

Perakende işletmelerin müşterilerine daha iyi hizmet verme ve beklentilerini karşılama kabiliyeti, perakende tedarikçinin verdiği ürüne, lojistik ve kurumsal etkinliklere bağlıdır. Bu destek bileşenleri, tedarikçi ile perakendeciler arasındaki ilişkide belirleyici bir rol oynamaktadır. Tedarikçilerin davranışlarından bazıları perakendeci firmalarla ilişkinin sürekliliğini sağlayan katma değer oluştururken bazılarının da hiçbir etkisinin olmadığı görülmüştür.

Bu zincir mağazalarına değer katmak mağaza içinde ve dışında bazı değişiklikler yapılmıştır, bazı raflar değiştirildi, bazı ürünlerin raftaki miktarları değiştirildi. Diğer yandan ise müşterinin gözündeki imajı değiştirmek için ürün markaları, ürün stantları ve market tabelası değiştirildi.

Bu değişikliklerden sonra farklı bölgelerden 29 mağaza seçilerek mağazaların önceki ve değişim sonrası durumları istatistiksel analiz edildi. Öte yandan müşterilerin gözünde mağazaların imajını veri analiziyle test edildi ve bunun için anket yapıldı.

Bu çalışmanın amacı; tahmine dayalı analitik çalışmaların, organizasyonların daha etkin aksiyonlar almasına yardımcı olarak, etkinliklerini pazarlama, satış, tedarik zinciri vb. pek çok farklı alanda önemli derecede artırmalarına yardımcı olduğunu kanıtlamaktır.

Bunların hepsi sadece güler yüzlü müşteriler görmek için yapıldı. Eğer mağazada güler yüzlü müşteriler görüyor iseniz, bu o mağazada iyi bir servis kalitesi ve iyi bir tedarik zinciri yönetimi olduğunu göstermektedir.

Anahtar kelimeler: Zincir mağazalarda tedarik zinciri yönetimi, zincir mağazalarda servis kalitesi, tedarik zinciri ve servis kalitesi arasındaki ilişki.

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Contents

LIST OF FIGURES

LIST OF TABLES

1. SUPPLY CHAIN MANAGEMENT

1.1. Defining Supply Chain Management

Item life cycle forms including physical, data, budgetary, and information streams whose object is to fulfill end client prerequisites with physical items and administrations from different, connected providers (Ayers, 2006).

Another source characterizes store network as, the system of elements through which material streams. Those elements may incorporate providers, transporters, fabricating locales, appropriation focuses, retailers, and clients (Lummus and Alber, 1997).

Physical, data, and monetary streams are customary inventory network measurements. Be that as it may, an exceptionally normal perspective of supply chains as acquiring or physical appropriation is constraining. Data and money related segments can be as vital as physical stream (Ayers, 2010).

The Supply Chain Council (1997) uses the definition: "The supply chain - a term increasingly used by logistics professionals - encompasses every effort involved in producing and delivering a final product, from the supplier's supplier to the customer's customer. Four basic processes - plan, source, make, deliver - broadly define these efforts, which include managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customer."

The supply chain should support the satisfaction of end-user requirements. These requirements give rise to the fundamental mission of supply chains: matching supply and demand (Ayers, 2010)

An inventory network likewise has different, connected providers. From the client/end client perspective, a store network exists when there are different ventures backing the last-interface endeavor that conveys the item or administration. Under this condition, the area hairdresser would not constitute a store network in spite of the fact that a chain of barbershops would (Ayers, 2010).

To sum up all the definitions show that supply chain management links the all chain from producer to end user with efficient and cheaper way.

1.2. A Logistical Perspective of Supply Chain Management

Supply chain management has captured the attention and interest of many organizations. Logistics is perhaps misunderstood or even overlooked with the excitement surrounding supply chain management and all of the related technology that has been developed to support supply chains. The glamour associated with e-supply chain, e-tailing, e-business, and so on seems to overshadow the importance of logistics support in a supply chain. "Logistics might be regarded by some individuals as mundane and staid when compared to supply chain challenges and initiatives such as globalization and demand management." (Coyle, 2002)

"Logistics professionals and other knowledgeable managers realize, however, that in spite of all the hype about the Internet, successful organizations must manage order fulfillment to their customers effectively and efficiently to build and sustain competitive advantage and profitability." (Coyle, 2002)

"The challenge is to manage the entire logistics system in such a way that order fulfillment meets and perhaps exceeds customer expectations. At the same time, the competitive marketplace demands efficiency, controlling transportation, inventory and other logistics related costs." (Rico, 2013). It is important to describe the relationship between logistics and supply management.

Another perspective on supply chain management views it as a connecting network of logistics systems and related activities of all the individual organizations that are a part of a particular supply chain. The collective logistics systems play a role in the success of the overall supply chain (Coyle, 2002).

1.3. Globalization

For supply chain managers, globalization influences range from upstream suppliers to downstream customers. For smaller manufacturers who export to other countries, their executives must monitor not only production lines but also the currency

markets. The move to "offshore" sourcing, for the most part to cut material cost, gives chances to occupations and interest in creating nations. At the point when this happens, globalization puts new cash in individuals' pockets, enlarging markets for organization items. For instance, the Chinese interest for Rolls Royce is restricted in light of the fact that generally few can bear the cost of any auto by any means. Be that as it may, as Chinese organizations develop through fares, auto purchasers are created.Carly Fiorina, CEO of Hewlett-Packard, caught the potential for extending markets far and wide. Her remarks refered to a discourse by Bill Moyers that profiled a town of 100 individuals that reflected the worldwide group:

57% of individuals from Asia, 21% from Europe, 14% from the Western Hemisphere, and 8% from Africa.

30 % of peoples' religion ise Christian.

80% live in inadequate house.

50% suffer from undernourishment.

20% have never drink clean water.

70% cannot able to read.

65% don't know what telephone is.

35% of salaries only 60$.

1 is school instructed, and 1 owns a PC.

The profile demonstrates that there is much to do to raise living standards and create markets. Through globalization, many more could enjoy the benefits of the kind of prosperity advanced economies provide.

Another globalization pattern is the requirement for manufacturing plants and their supply chains to serve more extensive, worldwide markets. An illustration is Bombardier Transportation, which conveys rail gear and secondary selling parts for rail hardware for use far and wide. Through various acquisitions, the organization had amassed twenty-one assembling destinations in Europe with 25,000 workers. Production line expansion had turned out to be normal since national governments favored neighborhood providers for their rail frameworks. The circumstance called for shutting copy or excess assembling limit, a procedure alluded to as "supporting" a supply chain (Ayers, 2010).

1.4. The Evolution of Service Supply Chain Management

In recent years, services, as the driving force of the economies, have become increasingly important. Also, it is obvious that the service industry has a great potential for the coming years. To date, as a general rule, manufacturing practices have been applied to the service area. Furthermore, it is clear that the importance of service concept is increasing for the manufacturing companies as well as the service organizations. Recent empirical studies have revealed that manufacturing companies can achieve competitive advantage through manufacturing performance by the expanded service roles (Voss, 1992; Youngdal and Loomba, 2000). The management of the service flow along the supply chain is one of the most significant components of both manufacturing supply chains and services supply chains. However, there are many potential drawbacks of service flow management or service distribution in the supply chain. Service flow along the supply chain can be difficult to manage, since the service creation and maintenance are challenging. Also, the raw materials of the services, which are often dominated by time, can be difficult to measure (Shostack, 2001). Such difficulties lead to a conflict about making decisions on "what is marketed, what is managed, what is being flowed". It can still be a simple product or service and it is often more complex combination of product and service. In view of fact that there is a gray area between service and manufacturing field which means a mixed industry (Shostack, 2001). The effective supply chain is needed for manufacturing and service industries as well as the industries of such mixture.

To increase the effectiveness of materials, services and information flows along the manufacturing supply chains, the companies mainly focus on the manufacturing performance in order to increase their competitiveness through quality, flexibility and delivery (Youngdal and Loomba, 2000). Since, manufacturing of goods is viewed as the main activity of most companies, the management focused on the supply chains for manufactured goods. The source of efficiencies in service supply chains is directly related to the issues such as management of capacity, flexibility of resources, information flows, and service performance that creates a need of an approach rather than the manufacturing supply chains. Though there exist many differences between

manufacturing and services supply chains, there are some similar processes such as demand management, customer relationship management and supplier relationship management.

Since service businesses are still becoming more complex and branched out organizations, the service management turns out to be more challenging for the service firms. Accordingly, as stated before, the value of effective supply chain management is becoming more intense not only for the manufacturing companies but also for the service companies. Therefore, supply chain management becomes a critical competitive tool for the service companies; the managers of these companies seek for the ways to better implement the supply chain management practices. Also, those managers have realized the significance of the practices to be a critical member of a supply chain, to be integrated with the other firms such as intermediaries, suppliers, and industrial customers, to involve in close supply chain relationships, to gain the advantages of effective coordination, cooperation and synergy along the supply chain. Thus, like in the manufacturing industry, effective supply chain management is a key requirement in the service industry. However, there is limited scholarly work about services supply chain, since the field of services supply chain is unexplored. The main problem beyond the development of services supply chain is the traditional focus on the manufacturing sector. Widely used models, analysis and practices are mostly manufacturing business oriented. As Nie and Kellogg (1999) suggested, such an orientation impedes the development of services supply chain literature. The main reason of manufacturing orientation is that the service operations' complexity. However, this complexity indeed highlights the importance of the linkage between the concepts of service business and supply chain. Hence, if more complex structures or concepts may be examined and understood in detail, transferring the knowledge to less complex concepts, as manufacturing oriented supply chains, will be more logical and easier.

Although the service businesses may benefit from manufacturing oriented applications there is a need for concentration into service supply chains due to the differences between services and goods. It is important to recognize whether the methods of manufacturing sector can be directly applied to services supply chains. Though supply chain management is a well-known concept in manufacturing, the concept and the

potential benefits that will occur after the successful implementation of services supply chain management have recently been familiar for the businesses. It may be thought that service businesses may benefit from the best practices of manufacturing oriented applications. However, the distinctive nature of service businesses creates a need for services supply chain management tools that are specific to the service sector. Also, due to the lack of a central system to produce and manage services, formalized approaches for managing services do not exist.

Accordingly, the topic of 'service' is often a single part or chapter in popular textbooks in operations management, purchasing and supply management and supply chain management (Ellram et al., 2004).

In addition, transferring marketing concepts and practices that have been developed in manufacturing companies to the service organizations is often not correct. This is due to the fact that marketing management practices in the service sector differ from those in the manufacturing sector (Lovelock and Wirtz, 2004). Similarly, the supply chain management practices for the manufacturing industry tend to differ from those in the service industry.

Although research in services supply chain is scarce, the number of the studies related to services supply chain has increased in the recent years. As an example of early studies in the area, Armistead and Clark (1993) integrated the concepts of service industry and supply chain by suggesting Porter's value chain as a strategic tool for service businesses.

Hellman (1995) investigated the cooperative relationships in insurance companies. He emphasized that cooperative relationships such as the alliances are more critical for service companies compared to the manufacturing firms. In this context, he emphasized that the cooperative relationships along the supply chain are vitally important in service industry.

The service factory concept was extended to global supply chains by Youngdahl and Loomba (2000). Their contribution for future research about conceptualization of the service operations in global supply chain management is also critical. Sampson (2000) made a remarkable contribution with a focus in consumer-supplier duality along the services supply chain. Sampson (2000) has strengthened the contributions of Hellman

(1995) on the cooperative relationship between different entities of a services supply chain.

Cook et al. (2001) explored the concept of services supply chain management with a focus on healthcare industry. They emphasized that the supply chain management concept is not yet recognized well by service sector practitioners. They suggested that the main reason of such a situation is the lack of a systematic integration of supply chain functions in the service business.

Kathawala and Abdou (2003) aimed to adapt the manufacturing oriented supply chain operations and framework into the service oriented ones. To this end, they emphasized on the concepts of total cost of logistics and trade-off analysis between cost of logistics activities and the cost of increasing the quality of the service along the supply chain.

The study of Ellram et al. (2004) provided the most significant contribution to service supply chain literature. The study proposed a framework for services supply chain, which highlights the key service processes along the supply chain. The general framework was adapted from manufacturing-oriented supply chain management literature. The authors identified the key service processes/functions as information flow, capacity and skills management, demand management, supplier relationship management, customer relationship management, service delivery management and cash flow.

1.5. The Advantages of Supply Chain Management to Business

Redundant use of sources, costs and waste of time could be avoided as a result of collaboration and information sharing between businesses by supply chain management. Also have other benefits,

Improvement in delivery performance

Reduction of inventories

Reduction of cycle time

Increased forecast accuracy

Increased productivity along the chain

Decreasing costs along the chain

These advantages and more of them provide fully communication, coordination the business together, reduction of cost, increased productivity, increased profitability and customer satisfaction along the chain.

With a co-ordination and information sharing can reduce the uncertainty in the demand so overstock could be denied. Result of this, the reduction in cost and convenience in planning.

On the other hand, the result of that the chain management has given the trust and collaboration, risks could be shared, relief of stress and increased flexibility can cause a new product and decreased the take place time in market, it is also benefit for against competitors. Following these cash flow gets regular through the chain and profitability would be increased.

1.6. Supply Chain Operations

1.6.1. Inventory

Inventory include raw materials, semi-finished products and products which are takes place in manufacturer, distributer, wholesaler and retailers. The role of inventory in supply chain is forecasting the future demand and using the economics of scale in production and distribution to reduce cost.

1.6.2. Order Management

The process has been including orders between the partners of supply chain. On time and complete order delivery is important because of good relation between customer and supplier. Industries have to be well organized about order management whether or well educated employers whether or well organized information system to on time order flow between them. After order flow retailer is prepare it in inventory and deliver to customer. The operation repeated in all supply chain from producers to supplier and customer.

1.6.3. Distribution

Dissemination is characterized as the transportation of the item from the purpose of creation or transshipment to the point or focuses where request has been recorded, with a specific end goal to fulfill the desires of the generation undertaking and the purchaser (Binioris, 2008). The physical appropriation is a piece of the inventory network, and its motivation is to convey merchandise/administrations to the customers. All the more particularly to the request purposes of the completed item in the ideal place and time, in the correct amount and at the most reduced conceivable aggregate cost (Blanchard, 2010).

The determination of the ideal physical dissemination framework, happens when the venture can answer the accompanying inquiries (Binioris, 2008):

I) What is the way of the market and the clients to which the venture goes for?

II) What sorts of items will be exchanged?

III) Do these sorts of items require exceptional treatment?

IV) What are the dissemination targets for organization?

V) Will numerous material-transshipment distribution centers be made and assuming this is the case, excessively numerous diverse focuses?

VI) What is the cost of the conveyance arrange?

1.6.4. Storage

"A second area, which has a tradeoff relationship with transportation, is storage. Storage involves two separate but closely related activities: inventory management and warehousing. A direct relationship exists between transportation and the level of inventory and number of warehouses required. For example, if organizations use a relatively slow mode of transportation, they usually have to hold higher inventory levels and thus have more warehousing space for inventory. An organization might consider using faster, more expensive mode of transportation to eliminate some of these warehouses and the inventory stored in them." (Coyle and Langley, 2002)

A number of important decisions are related to storage activities, including how many warehouses are needed, how much inventory should be held, where to locate the

warehouses, what size the warehouses should be, and so on. Because decisions related to transportation affect storage-related decisions, a decision framework to examine the tradeoffs related to various alternatives is essential to optimize overall logistics system. Storage is also important to overall supply chain, and there are opportunities to reduce storage in the overall supply chain (Mohan, 2013).

1.6.5. Facility Location

"Another area of interest is plant and warehouse site location. A site location change could alter time and place relationships between facilities and markets or between supply points and facilities. Such changes will affect transportation costs and service, customer service, and inventory requirements." (Coyle and Langley, 2002)

1.6.6. Transportation

Transportation is the moving of a heap from a creation site to where request happens (Binioris, 2008). In the course of the most recent 30 years, we have seen that an arrangement of direct transportation of merchandise from the creation site to the place of utilization or utilization, we step by step incline towards a framework with mediator fixation stopovers and synchronous decentralization of the appropriation of burdens. The stations that these days, more often than not, appear as ware focuses, are called center points and the entire arrangement of exchange strategy that they take after is called center and talked and primarily air-bearer and air-transport organizations execute this approach (Serdaris, Antoniadis, Tomlekova, 2014).

The real method for transportation as recognized by coordinations reading material (Ballou, 2004; Binoris, 2008) are the accompanying:

Rail transportations: they can exchange a lot of item crosswise over long separations, by keeping the cost low. Rail vehicles can convey materials, paying little mind to whether they are stuffed or unloaded or in some other frame. For that very reason, rail transporters offer the suitable offices and the correct material recognition. The primary contenders of rail transporters are street Hauliers, who work on particular cost and convey at the concurred time and place not at all like the rail bearers that show

changes in the exactness of conveyances.2) Road transportations: Today in Europe, they represent the most popular form of transportation. Nowadays, many variants of road transports exist and operate, and they cover any shipping need. Thus, depending on the usage, there exist tanker vehicles, freezer trucks, cars transporting materials, cars that carry packaging and transportation platforms, which are also called containers. The main advantage of road transport is both their ability to carry from door to door and the flexibility of their routes and the ability to change directions at any time. Nowadays, many variants of road transports exist and operate, and they cover any shipping need.

Sea bearers: they are isolated into enormous classifications which are: household and abroad. The sort of vessel that is being utilized varies relying upon the kind of delivery load. In this way we meet: fuel-bearer ships (tankers), gas conveying ships, dispatches that convey autos, and pontoons for conveying different water crafts (LNG's). The minimal effort of transportation per nautical mile and the capacity to convey expansive burdens, are a piece of the fundamental favorable position of this method for transport. Rather, the long time that is required for the exchange with this method for transport, is its principle disservice.

Air Carriers: in the field of air transportations, we watch the idiosyncrasy that more travelers are exchanged, than burdens. The rate of burdens in transportations approaches 10%. Fundamentally through planes, two administrations are conceded: the shipment of little bundles, as a rule up to 30 kilos, which are conveyed and gotten in where gear are checked, and air shipments of burdens and particularly shipments in snappy bundle or bundled and rapidly, "bundle express", which make strides the current years. The sorts, which are primarily transported via air transport, are: dress and footwear, electric gear, wrote material, blooms, auto parts, and medicinal pharmaceutical material.

Pipelines: along these lines of transporting fluid and gas freight shows up in our nation through our own manufacturing plant offices or organizations that refine and endeavor the items that are in fluid shape. The upside of the conductors is the minimal effort and their burden is their powerlessness to change organize establishment.

1.6.7. Information Technologies

Innovation has majorly affected supply chains as a facilitator of progress as organizations have changed their procedures. In any case, it is additionally a noteworthy constrain in changing the element of the commercial center. People and associations are associated all day, every day and have entry to data on a similar premise through the Internet. Web crawlers, for example, Google have made it conceivable to assemble convenient data rapidly. We have ended up what a few people portray as the "click here" era. We no longer need to sit tight for data to be "pushed" to us through the media on their timetable; we can "pull" data as we need it. Immense stores of information and data are for all intents and purposes readily available. Interpersonal organizations, for example, Facebook and Twitter are assuming a regularly expanding part in business associations and will impact supply chains as a result of their effect on client request and speed of data exchanges. Many organizations see chances to information mine the tweets to reveal request related data for enhanced guaging (Coyle and Langley, 2002).

It has been contended that innovation has permitted people and littler associations to interface with the world's learning pools to make an inconceivable arrangement of chances for cooperation in supply chains. A conclusion of this marvel is that the world has turned out to be level. As it were, generally immature nations, for example, China and India have gotten to be empowered and can take part in the worldwide economy considerably more promptly. The world is no longer tilted toward the created nations, for example, United States and European nations regarding a financial favorable position. Outsourcing to the less-created nations has been upgraded by innovation. Coordinated effort openings with people and organizations all through the globe have expanded. The other side is that these financial advances have likewise made market open doors for U.S organizations. Therefore, the stream of business has gotten to be multidirectional. This element additionally expands the requirement for productive and powerful supply chains (Friedmans, 2013)

1.7. Supply Chain Management in Chain Stores

1.7.1. Customer Relation Management

Since customers are the most important assets for an organization, todays organizations need to understand customer's needs, expectations and motivations deeply and create strategies and offers for each and every customer to attract them for being successful. Customer experience is all about interactions between customers and Organization through different channels. The overall goals are to find the potential customers, to attract them and win new clients, retain those the company already has, grow customer's value by creating cross and up sell opportunities, reduce the costs of marketing and client service, understand customers with high risk and detect fraud.

The best way to understand customers deeply is to have a dialogue with them. This can be possible for a little grocery store, but for sure not possible for an organization with thousands of customers. Customer relationship management is a new way of thinking based on improving profitability, revenue, and customer satisfaction, for managing a company's all interactions with customers, clients and sales prospects. It involves using technology to organize, automate, and synchronize business processes (Vazifehdust, Shahnavazi, Jourshari and Sharifi, 2012)

1.7.2. Customer Service Management

The seen part of industry from customer. To inform a customer on time about commitment transportation time and availability of stock etc. To help customer about products. The key of product and contract. The IT system informs customer about production and distribution in real time, delivery date, the status of product and quantity could be seen by the customer interface. As a result, customer service group is required to support its customers with product applications

1.7.3. Demand Management

Customer's demand and variety has been increasing with product variety. This situation is risky for stocking and forecasting the products and sales. Supply chain management in the product or service flow basis with the push system from manufacturer to customer, with the demand pull system when customer requirement manufacturer to customer. Today's customer focused supply chain system's flow structure with demand based production seen as more effective. This structure show that the forecasting is not enough, more realistic and current customer demand would be known. Effective customer database and CRM information programs have a chance to see real sales and customer's need through the internet on real time. And the flow calculate and showed the real demand to manufacturer and production have be done more effectively, raw material, semi-finished product, spare part could be ordered on time with min safety stock. To sum up the today's system has been decreasing the overstock, damaged stock and unsolicited stock and the result cost decreasing.

1.7.4. Customer Order Fulfillment Management

The key to effective SCM is meeting customer need dates. It is important to achieve high order-fill rates either on a line item or order basis. Performing the order fulfillment process effectively requires integration of the firm's manufacturing, distribution, and transportation plans. The order fulfillment process involves more than just filling orders. It includes all activities necessary to define customer requirement and to design a network and a process that permits a firm to meet customer requests while minimizing the total delivered cost as well as filling customer orders. This is not just the logistics function, but instead needs to be implemented cross-functionally and with the coordination of key suppliers and customers. Alliances should be developed with key supply chain members and carriers to meet customer requirements and reduce total delivered cost to the customer. The objective is to develop a seamless process from the supplier to the organization and to its various customer segments (Croxton, 2003).

1.7.5. Inventory Management

In retail supply chains, poor renewal execution prompts to item accessibility issues in stores, or, then again, oversupply of items. This shows especially in overseeing outstanding interest circumstances, for example, special battles, occasional request and item presentations, where request is less unsurprising (Taylor and Fearne, 2009). These issues have a direct money related effect all in all inventory network as lost deals and benefit (Corsten and Gruen, 2003), or, in instances of oversupply, the items being disposed of on the grounds that the expiry dates have passed or the season is over (Taylor and Fearne, 2009). As an answer for the issue, communitarian retail renewal rehearses have been displayed, for example, vendor-managed inventory (VMI) and collaborative planning, forecasting and replenishment (CPFR), which depend on the effective sharing of offers and stock data (Cachon and Fisher, 2000). In any case, these models have not completely understood the test of how to oversee remarkable request circumstances all through the inventory network.

1.7.5.1.Vendor Management Inventory

VMI is a traditional utilization of substituting stock with data, where the recharging choices for a client are moved to an upstream provider (Kauremaa, 2009). The provider screens the purchaser's stock levels and deals information (physically or electronically) and renews the stock, subject to settled upon parameters (e.g. most extreme and least stock levels) (Waller, 1999). The provider can pick the request amounts, delivering and timing inside as far as possible (Waller, 1999). The provider creates arrange recommendations in the VMI framework and the conventional buy request is hence evacuated (Waller, 1999).

1.7.5.2.Collaborative planning, forecasting and replenishment

CPFR extends the possibility of VMI to incorporate joint arranging forms (Seifert, 2003; Attaran, 2007). The potential advantages of sharing data for improved arranging perceivability were thought to be colossal (Fliedner, 2003). Despite the fact that

innovation assumes an imperative part in the execution of CPFR, it is not considered as a specialized standard (Attaran, 2007). Basic devices between store network accomplices bolster the procedure and empower chronicled information and figures to be shared. Whipple and Russell (2007) introduce three sorts of cooperative methodologies. This division of methodologies contrasts from VMI and CPFR, yet the outcomes demonstrate a similar impediment, specifically that a cross-useful shared association with a high economical result is hard to execute with an expansive number of partners (Whipple and Russell, 2007).

1.7.6. Supplier Relation Management

Supplier relationship management is the process that defines how a company interacts with its suppliers. As the name suggests, this is a mirror image of customer relationship management (CRM). Just as a company needs to develop relationships with its customers, it also needs to foster relationships with its suppliers.

SRM is understood as the sourcing policy based design of strategic and operational procurement processes as well as the configuration of the supplier management (Mettler T, Rohner P (2009)).

1.7.6.1. The Choice of Supplier

Many calculates today's worldwide markets have affected organizations to look for an upper hand by concentrating on their whole store network. Different exercises include in inventory network administration. Acquiring is a standout amongst the most key focuses on the grounds that it gives chances to decrease costs, and thusly, increment benefits. A basic assignment inside the acquiring capacity is provider choice. Organizations need to work with various providers to keep up their exercises. In assembling enterprises, crude materials and segment parts can approach up to 70% of item cost. In such conditions, the buying office can assume a key part in cost lessening, and provider determination is a standout amongst the most essential elements of acquiring administration (Ghodsypour and O'Brien, 1998).

For a long time, the conventional way to deal with provider determination has been to choose providers exclusively on the premise of value (Degraeve and Roodhooft, 1996). In any case, as organizations have discovered that the sole accentuation on cost as a solitary measure for provider determination is not proficient, they have transformed into a more far reaching multi-criteria approach. As of late, these criteria have turned out to be progressively mind boggling as ecological, social, political, and consumer loyalty concerns have been added to the customary variables of value, conveyance, cost, and administration (Mendoza, 2007).

A few components may influence a providers' execution. Dickson (1966) recognized 23 unique criteria for seller determination including quality, conveyance, execution history, guarantees, cost, and specialized capacity and money related position. Subsequently, provider choice is a multi-criteria issue which incorporates both substantial and immaterial criteria, some of which may strife. Fundamentally there are two sorts of provider determination issue. In the primary sort of provider choice, one provider can fulfill all the purchaser's needs (single sourcing). The administration needs to settle on just a single choice about which provider is the best. In the second sort (numerous sourcing), no provider can fulfill all the purchaser's necessities. In such conditions administration needs to part arrange amounts among providers for an assortment of reasons including making a steady domain of intensity (Huo and Wei, 2008).

1.7.6.2. The Communication with Supplier

The conventional supplier–customer relationship has been constrained to contact basically between the client's purchaser and the provider's sales representative. Different capacities, for example, data frameworks, are avoided especially at all costs. Without a doubt, the client's purchaser contends that dealings with the provider ought to just experience him or her: in that way, they guarantee that touchy correspondences, for example, those influencing cost, are constrained to a solitary channel (Harrison and Hoek, 2002).

This customary style of relationship ("bow tie") is stood out from a various contact show ("diamond") elective. In the "diamond" adaptation, contacts between

various capacities are decidedly supported, and a safe distance relationship of the "bow tie" is supplanted by dynamic relationship administration and provider advancement forms. This is exemplified by the wonderful changes in the provider portfolio at the UK High Street retailer BhS. In the mid 1990s BhS had more than 1,000 providers. Presently it has only 50. In any case, the nature of the association with the 50 is very extraordinary. There are currently multi-level associations between the production network players, and an abnormal state of electronic coordinated effort (Harrison and Hoek, 2002).

"There is also a much greater involvement by the remaining 50 suppliers in high-level strategy development at BhS." (Harrison and Hoek, 2002).

Table 1.7.6.2.1

Communication with supplier

Together	Seperate
• Congruent goals • Information sharing • Aligned coordination mechanisms • Joint decision making • Common knowledge	• Labour turnover • Bonus schemes not aligned • Lack of explicit relationship goal • Seperate decision making
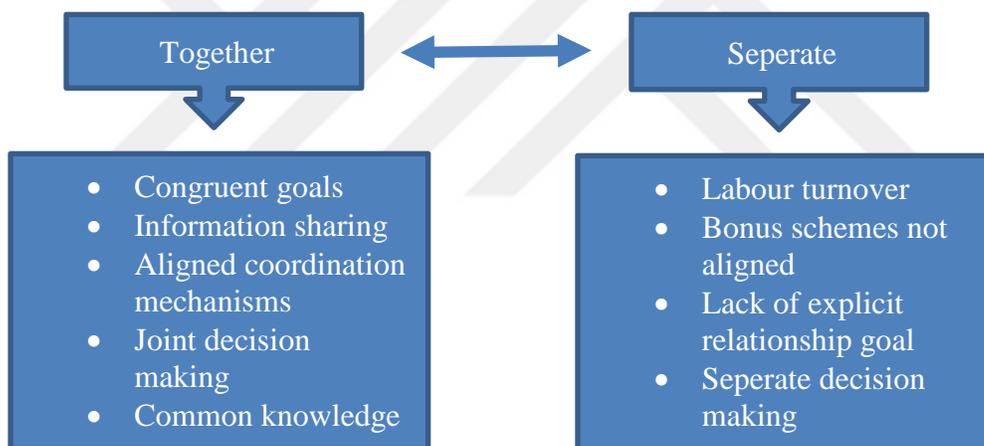
"We found that even the closest and most interdependent supply relationships in practice exhibit a tension between togetherness (a tendency to see the requirements for working together in the supply relationship) and separateness (the frustration of joint work or the positive aspects of working separately (Koulikoff-Souviron and Harrison, 2007). Table 1.7.6.2.1 shows this tension as an arrow that connects two contrasting behaviors." Harrison and Hoek, 2002).

1.7.6.3.Retailer-Supplier Relation

In the case of chain stores, the number of suppliers is reduced in order to have a better communication and relationship with the supply sources. Reduction of suppliers is creating a better retailer-supplier relationship. If you work with the supplier on the capacity of the chain, the cost of management and operation increases.

With the reduction of suppliers in supplier relations, the decrease in the total inventory costs of the chain store organization, quantity reductions due to large scales, reductions in logistics cost, decrease the lead time, increased mutual trust with communication, and increased performance and more successful customer service. For these reasons, many of the chain stores today are on the way of establishing their supply sources from limited but qualitative sources (Holmström, 1997).

Good long-term planning is needed to establish long-term relationships with suppliers. The established long-term relationship has led to a co-operation based on a more solid basis with suppliers rather than a specific timeframe. Significant benefits are gained from the tight relationships established between the retailer and the suppliers. Long-term relationships strategically managed with significant suppliers ensure that the performance of suppliers is enhanced. Through long-term relationships, the supplier becomes part of a well-managed supply chain and will contribute to increased competition in the entire supply chain (Rinehart vd., 2004). It can also be reduced in costs according to short-term relationships through long-term, trust-based relationships. With short-term relationships, more inventory is kept and transaction costs are added. Today, not only in the retail sector, it is more common in long-term relationships with suppliers in other sectors. It is very important that suppliers have quality certifications in supplier relations. This certification demonstrates the performance of the supplier in all matters. Here the supplier; It is requested that they establish trust and communication with the retailer, increase the product quality and reduce the inventory costs to the minimum. A retailer-supplier relationship is a compromise between a supplier's compliance with these standards and an increase in quality and reduced costs (Chen, 2004).

1.7.7. Storage

The products / loads from certain points / points are taken for delivery and maintained for a certain period of time and sent to a certain point / point. The length of the storage period differentiates the storage. Where the storage period is long, the place is called the warehouse, while the shorter the time, these are called the Distribution Center (DC), and the shorter is the transfer center. Storage mainly includes control, receiving, placing, counting, collection, control and sending activities.

In this strategy, producers keep them in a central depot before distributing the products they produce to customers. Storage times of materials are more than 24 hours. After the materials have passed through other logistic processes such as control, packaging, order processing, packaging, they are distributed to the customers who are in the demand by appropriate assignments. In other words, the materials are kept in the warehouse and distributed to the customers from here.

1.7.7.1. Stock Management

Inventory management includes the control of assets that the entity manufactures or buys to sell to perform its normal operations. The overall aim of inventory management is to determine the level of stock that will reduce the cost of all inventories in order to increase the profit of the business. In addition to this overall goal, inventory management helps minimize stock investments, maximize customer service quality and ensure efficient production (low cost). Inventory management also has secondary objectives, such as achieving high turnover rates, establishing effective supplier relationships, and finding continuous procurement opportunities.

1.7.7.2. Handling

At the beginning of terms used in logistics warehouse management "Material handling". Simply Material handling, loading of materials, transportation and to be emptied. If the material is mechanically handled Different types of equipment, equipment and Equipment is economically and safely used. Material Handling is mainly performed

by hand (human) or mechanically by means of a tool (Conveyor, forklift, transpalet, etc.) conveying, lifting, loading and unloading activities.

Material Handling: raw materials, parts, boxes, crates, pallets, luggage etc. From point A to point B most efficiently involved with all their movements. However, in addition to the above definitions, packaging in daily warehouse language, packaging, labeling, sorting, sorting, merging, palletizing, etc.

The Material Handling Institute of America (USA) ss follows: "Material handling is the right way to correct the right amount of material, is the art and science that provides the right cost with the right method at the right time with orientation."

1.7.7.3.Packaging

Packaging is the innovation of encasing or ensuring items for conveyance, stockpiling, deal, and utilize. Packaging additionally alludes to the way toward planning, assessing, and delivering bundles. Bundling can be depicted as a planned arrangement of get ready merchandise for transport, warehousing, coordinations, deal, and end utilize. Bundling contains, ensures, jam, transports, illuminates, and sells. In numerous nations it is completely incorporated into government, business, institutional, modern, and individual utilize.

1.7.8.   Return Management

At the point when a producer's item ordinarily travels through the production network arrange, it is to achieve the wholesaler or client. Any procedure or administration after the offer of the item includes turn around coordinations. In the event that the item is imperfect, the client would give back the item. The assembling firm would then need to arrange transportation of the deficient item, testing the item, disassembling, repairing, reusing or arranging the item. The item would go backward through the store network arrange keeping in mind the end goal to hold any utilization from the imperfect item.

2. RETAIL INDUSTRY

2.1. General information about retail industry

Retail businesses are distinguished by their direct to consumer business model. The term retail literally means selling things in small pieces amounts in the original French. Generally speaking, retailers sell products made by other companies and provided to them either directly from the manufacturer or from wholesalers that stocks products from many companies. The variability in this market is huge in terms of the goods/services provided, the scale of the operations, the channels used, and the method of organization. The largest retailers in the world, Wal-Mart, Carrefour, and Tesco are all examples of companies that sell a very broad range of merchandise but do not make products themselves. At the other end of the spectrum are specialty retailers that exclusively sell their own products. Coach and Eddie Bauer are examples of this type of retailer. Restaurant chains, including the large fast food groups like McDonald's and Yum Brands (KFC, Pizza Hut, and Taco Bell) are a special case of the retail segment since they produce what they sell for the most part (Coca Cola and Pepsi products being the obvious exception).

Retail also includes grocery stores, drug stores, service stations, convenience stores, shoe stores, home improvement stores, hardware stores, restaurant chains and a host of other establishments that most individuals frequent or pass by daily. There are also e-commerce retailers such as Amazon along with the many retailers that operate both Web and brick and mortar stores. The common thread all these divergent businesses have is their direct link to the customer (Şatır, 2011)

2.2. Retailing

Retailing involves selling products and services to consumers for their personal or family use. Department stores, like Burdines and Macy's, discount stores like Wal-Mart and K-Mart, and specialty stores like The Gap, Zales Jewelers and Toys 'R' Us, are all examples of retail stores. Service providers, like dentists, hotels and hair salons, and on-line stores, like Amazon.com, are also retailers (Harris, 2000)

Many businesses, like Home Depot, are both wholesalers and retailers because they sell to consumers and building contractors. Other businesses, like The Limited, are both manufactures and retailers. Regardless of other functions these businesses perform, they are still retailers when they interact with the final user of the product or service (Harris, 2000)

Retailers should make the purchase of goods easy for the consumer. That's why retail stores have salespeople, why Internet shopping websites have customer service instant chat popups, and why catalogs have descriptions, photos and toll-free phone numbers (Farfan, 2016).

Retailing is about displaying products, describing the features and benefits of products, stocking products, processing payments and doing whatever it takes to get the right products at the right price to the right customers at the right time. (Farfan, 2016).

Some retailers offer additional services to the retail transaction like personal shopping consultations, and gift wrapping to add something extra to the retail customer experience and exceed the retail customer experience (Farfan, 2016).
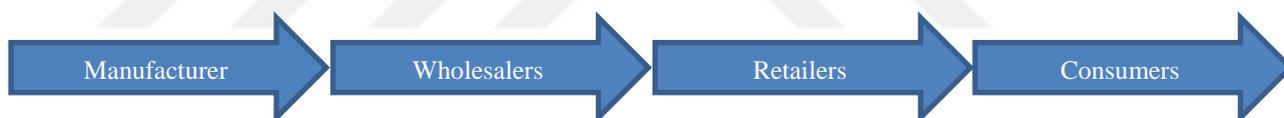
Figure 2.2.1 Product cycle

2.3. Chain Stores

Chain stores are retail outlets in numerous areas that share a brand and focal administration. As a rule include institutionalized business techniques. Some chain stores are branches claimed by one organization, while others are establishments possessed independently. A few components basic to chain stores incorporate concentrated promoting and buying, bringing about brought cost down to the shopper and higher benefit for the store (Penn, 2016)

Chain stores started amidst the nineteenth century with the foundation of the Great Atlantic and Pacific Tea Company, otherwise called A&P, in New York City. Woolworth and J.C. Penney soon took action accordingly. Today, Walmart is the biggest chain store. While the capacity of anchor stores to purchase in volume can bring down

costs for the purchaser, a few people scrutinize chain stores for advancing a nonexclusive across the country "homogenization" of the way of life by making such a large number of stores the same. Others feel anchor stores add to rural sprawl. A few purchasers appreciate the expanded assortment and lessened vulnerability gave by chain stores (Penn, 2016).

2.4. The development of Retailing in Turkey

The change of retailing in Turkey has been going ahead since 1990s. The adjustments in buyer observations and the move of Turkish economy to a more liberal economy have been critical elements for the auxiliary changes in the retailing division. Thus of these, the quantity of bigger retailers has expanded significantly while littler ones are attempting to make due in the new monetary environment. There is a critical increment in the quantity of present day retailers in Turkey since 90s (Kompil and Çelik, 2006).

The quantity of grocery stores expanded altogether while the quantity of hypermarkets came to 55 in eight years' opportunity until 1997. It demonstrates that there is a critical change prepare experiencing where little retailers living their places to bigger ones while all market organizations are expanding their numbers (Table 2.4.1). Be that as it may, the customary stores (particularly comfort stores and claims to fame) were still overwhelming players in the market (Tokatli and Boyaci, 1998).

Table 2.4.1

Breakdown for number of business sectors as per size, 1990-1997

	Hypermarkets	Large Supermarkets	Small Supermarkets	Large Markets	Small Markets
1990	0	15	8	59	1095
1991	0	21	11	70	1195
1992	2	26	18	81	1291
1993	16	30	25	92	1407
1994	27	36	31	117	1630
1995	35	44	48	157	1903
1996	42	70	74	251	2244
1997	55	83	78	301	2678

The advancement procedure after mid 1980s and some inward flow are imperative variables for this change procedure in retailing. With progression prepare, Turkish economy has changed the exchange administration and bolstered private part improvement in a focused economy. This procedure made another household financial environment more open to worldwide impacts. With the passage of the expansive enterprises and outside retailers to the open economy, the structure of the market has been adjusted. Two reasons were brought up for the change in the market. In the first place, the expansion in urban populace builds interest for items while in supply side there are upgrades identified with the increment in assembling and import progression approach. The second impact activating household companies for entering to the area is the high trade spill out of retailing out a high intrigue economy like Turkey and the estimation of land property of these retail locations.

The positive local environment likewise had impacts on the change procedure.

In the first place, the purchaser propensities have changed with the presentation of broad communications. Western shopper propensities have turned out to be viable in huge urban areas like Istanbul, Izmir and Ankara.

Be that as it may, the presence of conventional arrangements is still a reality in Turkey particularly in rustic territories. Particularly high transportation costs and

conventional utilizations propensities can in any case be viable on the store selection of buyers by directing customers towards customary retailers. Notwithstanding the adjustment in the request conditions, the nonattendance of an administrative system as a section obstruction made a positive situation for the piece of the pie of retailers (Çelen, 2005).

2.5. Chain Stores in Turkey

Local companies and international companies have invested in retail industry with a wide range of food, electronics, fast-food, textile, construction products, and furniture in Turkey. Some examples from Turkey are Migros, Sok, Bim, Beymen, Boyner, D&R, Metro, Carrefour, Burger King, Mudo collection.

2.6. Coverage of Retailing

2.6.1. Variety of Retailing

Retailer organizations, institutions, organizations and businesses are classified according to various criteria and different forms. Rom J. Markin, classified the industry in 4 four category,

(1)   By Selling products:

Offering all kind of products (grocery)

Offering wide variety of products (supermarket)

Department stores

(2)   By functions:

- Service stores
- Self service
- Cash Carry (Metro gross market)
- Supermarkets
- Non store retailing
  - Direct selling
  - Electronic commerce

- Online shopping
- Teleshopping

(3)   By Property
- By size
  - Independent retailers
  - Combined retailing
  - Retail groups
  - Chain stores
  - Branch stores
  - Franchising stores
  - Multinational retailers
- By qualification
  - Producer's store
  - Rented department
  - Corner shop
  - By company
  - Public stores
  - Cooperative stores

(4)   By settlement
- On street
- In trade center
- In shopping center
- In filling station
- ATM

2.6.2. Retail Store

Service stores: "Has low capital and small selling area, selling one or limited product.

Grocery: is a retail store that primarily sells food. A grocer is a bulk seller of food. Grocery stores often offer non-perishable food that is packaged in cans, bottles and boxes, with some also having fresh produce, butchers, delis, and bakeries." (Mayo, 1993).

Supermarket: "a large form of the traditional grocery store, is a self-service shop offering a wide variety of food and household products, organized into aisles. It is larger and has a wider selection than a traditional grocery store, but is smaller and more limited in the range of merchandise than a hypermarket or big-box market. The supermarket typically comprises meat, fresh produce, and dairy and baked goods aisles, along with shelf space reserved for canned and packaged goods as well as for various non-food items such as kitchenware, household cleaners, pharmacy products and pet supplies." (Hamlett, 2008).

Hypermarket: "is a superstore combining a supermarket and a department store. The result is an expansive retail facility carrying a wide range of products under one roof, including full groceries lines and general merchandise. In theory, hypermarkets allow customers to satisfy all their routine shopping needs in one trip.

Shopping mall: is a building or group of buildings that contains stores. The stores are connected by walkways so that consumers can easily walk between the stores. Malls can be built in an enclosed or open-air format." (Lugweyne, 2015).

Department store: "is a retail establishment offering a wide range of consumer goods in different product categories known as "departments". In modern major cities, the department store made a dramatic appearance in the middle of the 19th century, and permanently reshaped shopping habits, and the definition of service and luxury. Similar developments were under way in London (with Whiteleys), in Paris (Le Bon Marché in 1852), in New York (with Stewart's), and in Turkey Boyner."

(en.wikipedia.org/wiki/Department_store)

Discount stores: "Which sells products at price that are lower than the typical market value. May be offered a wide assortment of goods with focus on price rather than service, display, or wide choice such as Sok, Bim. The store may specialize in specific nonfood products, electronics, and jewelry." (en.wikipedia.org/wiki/Discount_store).

Cash and carry: "is different from regular retail chains which target professional customers rather than end-consumers. This concept is based around self-service and bulk buying and serves registered customers only. The core customer groups are hotels, caterers, traders and other business professionals. Such stores aim to prevent any intervention by middlemen and requires buyers to make their own arrangements and assume all risk." (Adamian, 2013)

Category Killers: "is marketing industry jargon for a product, service, brand, or company that has such a distinct and sustainable competitive advantage over other firms in its market that competing firms find it almost impossible to operate profitably and almost all the competitors in the market." (Berman and Evans, 2014). Example from Turkey D&R.

Catalog merchant: "sells a wide variety of household and personal products, with many emphasizing jewelry. Unlike a self-serve retail store, most of the items are not displayed; customers select the products from printed catalogs in the store and fill out an order form. The order is brought to the sales counter, where a clerk retrieves the items from the warehouse area to a payment and checkout station." (Berman and Evans, 2014).

2.7. The Functions of Retailing

Organizations should prepare the products for us and make them ready for sale; we will have the opportunity to get the time we want and we will be happy to make us happy by making various surprises like price reductions and gifts. Here, retailers try to provide them with a variety of retailing functions. Based on this statement, we can easily say that retailers target masses are consumers. In fact, the purpose of taking part in the distribution channel is to carry out various activities for the consumers.

2.7.1. Product and Service Diversification

15000-30000 kind of products could be found in middle size of supermarket. This kind of diversification has given chance to customer to find and choice easily brand, colour, size, model and price that they want. On the other side, producer have experted on its products. After producing producer sell to retailer, retailer sell to end consumer. If this chain was not operate, consumer had to sell it in its store. For example to buy juice, consumer had to go juice producer's store, detergent in detergent producer's store, bread in bakeshop, biscuits in biscuit producer's store etc. Retailers perform diversification function to avoid such kind of problem, consumer can find what they need in one store.

2.7.2. Sell in Small Quantities

Retailers purchase large quantity of products to decrease cost of transportation, cost of storage and cost of product from wholesaler or producer. But consumers buy what they need in small quantities. Therefore retailers offer products in small quantities tailored to characteristics of the customers and their purchasing habits. Some factors can change customer's habits. Store management have to follow this changes closely and have to ready to sell the products, that found from the change, in wanted quantity and kinds.

2.7.3. The Availability of Stock

Availability of stock is very important in retail industry because products have to be found when it needed from consumer otherwise customer can go to another store, maybe will not come again the store. Retailers don't want to struggle this kind of problem because of that they have a place in distribution chain to be ready the product in their shelves. Consumers think that they will find what they need in which store they want so they sell in small quantities. Therefore stores have to keep stock.

2.7.4. Provide Service

Retailers offer a variety of services to facilitate consumers' product use and consumption. Some of them are shortening the length of your clothes in clothing store, getting home after your shopping, short time education to how to use your new computer.

2.7.5. Information Sharing

With this activity, retailers can help both producer and consumer. Nowadays, thanks to information technology, consumers are offered to retailers in a wide range of topics such as product diversification and price level, and they are provided with the opportunity to buy products in the direction of this recommendation. Likewise, this valuable information reaching to retailer is possible to reach the producers. By fulfilling these functions, retailers provide place, time, and property, shape utility for consumers. These functions are that;

Place utility: Retailers' products or services are where consumers want or need it.

Time utility: Retailer provide service or product when the time consumer want.

Property utility: Retailers transfer the ownership of products to customer instantly, although they may be willing to pay the price with credit.

Shape utility: Retail stores offer benefits such as mounting products and narrowing their garments and shortening their necks.

2.8. Key Performance Indicators in Retailing Sector

Key performance indicators are those financial and non-financial or metric that are used to evaluate the growth of the organization (i.e.) how successful it is. On most cases Key Performance Indicators (KPI) is used in a long term organizational goals. Key Performance Indicators (KPI) helps a retailer to analyst the mission, identify the stakeholders and define the goals. The Key Performance Indicators (KPI) is also known as Key Success Indicators (KSI).

Not every one of the retailers embrace a similar sort of KPI to meet the hierarchical objectives. Be that as it may, having certain KPI in an association has turned

out to be required for a retailer. There are sure fundamental KPI to receive by a retailer are, for example,

Deals – yearly turnover, exchange made, wicker container spend, footfall - all against LFL and spending plan

Operational – accessibility, stock trustworthiness,

Compensation

Benefit – Complaints that are made

HR advancement – preparing, guiding, staff turnover

Variable expenses – any costs made at an extra cost are avoidable

KPI is characterized it gives the reasonable thought regarding the objectives and the measure lastly what to do with them? It gives a reasonable thought what is vital in the association and for what they need to work for to accomplish. The KPI can be utilized as the execution estimation instrument. It helps in dealing with the execution of the association. Likewise ensure that everybody surpasses or meets the KPI. There are numerous KPI set by retailers keeping in mind the end goal to accomplishing in their business. Giving a dubious KPI, for example, "Ought to have rehash clients" won't help you to meet the hierarchical objectives. The best KPI would be "Employee Turnover" which you help you in figuring the execution of a worker.

Five top key performance indicator set by retailers, for example,

"Sales per hour – Statically compares one sales person with the other and determines who is efficient in selling and attending the customers.

Average Sale – Statically compares the average selling price of a sales person. The higher statistics shows that the person has a wide knowledge on the product and the less statistics reveals that he lacks in the product knowledge or effective description.

Items Per Sale – determines the ability of a sales person compare to sale.

Conversion Rate – shows how many customers they have made from the visitors of the store.

Wage to Sales Ratio – gives a graph comparing the hourly wages of a sales person to hourly sales they have made. This KPI determine their performance level and how effective they are."

(Retail blog, 2009, http://retaildirectory.blogspot.com.tr/search/label/KPI)

3. SERVICE QUALITY

3.1. Definition of Service

There are different meanings of service. "An activity or series of activities of a more or less intangible nature that normally, but not necessarily, takes place in interaction between the consumer and service employees/and or physical resources or goods and/or systems of the service provider, w which are provided as solutions to customer problems" (Gronroos, 1990).

"Any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product" (Kotler, 1991).

"A service is something that can be bought or sold, but which you cannot drop on your foot" (Gummesson, 1993).

"Diversity of service can best characterize the service sector. Service organizations vary in size from large international corporations, such as airlines, banks, insurance companies, telecommunications companies, hotel chains, and freight transportation companies to locally owned and operated small businesses, such as restaurants, laundries, taxis, and other business services."(Lovelock, 1996).

"Any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product" (Kotler 1994).

"The characteristic of intangibility specified in the definition means that services, as opposed to physical products cannot, be seen, tasted, felt, heard or smelled before purchase. Managers need to focus on providing tangible evidence of service quality to reduce customer uncertainty." (Chaston and Mangles, 2002).

Lam bin states, "Services are immaterial. They exist only once produced and consumed. They cannot be inspected before purchase and the selling activity must necessarily precede the production activity. As the consumer goods firm, the service firm is selling a promise of satisfaction." (Lam, 2000).

"Peter and Donnelly note that the American Marketing Association (AMA) defines services as "activities performed by sellers and others that accompany the sale of

a product, and aid in its exchange or its utilization" (Peter and Donnelly, 2000)". Also service products as "intangible, or at least substantially so. If totally intangible, they are exchanged directly from producer to user, cannot be transported or stored, and are almost instantly perishable. Service products are often difficult to identify, since they come into existence at the same time they are bought and consumed" (Peter and Donnelly, 2000).

"There are four differences between service functions of manufacturing and service firms. First, service companies have no product with exact specifications. Second, services are perishable. Third, there is a strong customer or client presence in services. Fourth, services need delivery systems."(Jablonski, 1992).

"Service companies need people's performance to effectively complete service. Service companies have to invest in attracting, developing, motivating, and retaining quality people to perform the service in order to create value for customers. Service providers in a service company are key marketers because their actions strengthen or weaken the company's reputation with customers and prospects." (Berry and Parasuman, 1993)

3.2. Service quality

The search for quality was notably one of the most important consumer trends of the 1980's specifically because consumers began to demand products and services of higher quality than ever before (Leonard & Sasser, 1982). "Organizations were forced to offer customers more quality products and services in order to be competitive" (Hensel, 1990), but delivering quality service and meeting the needs of customers was a difficult challenge for many service providers. Most consumers already had a relatively clear definition of product quality formed in their minds. For example, if a customer found a shirt to be comfortable, saw that the shirt's buttons and seams remained intact after repeated use, and considered the shirt to maintain a good appearance for a reasonable period of time after purchase, a consumer is likely to consider the shirt to be of high quality (Anderson, 1993). If a garment does not have the features that a consumer desires, then the manufacturer improves the level of quality by incorporating them into the garment. Service quality, on the other hand, has not been so readily identified. When a

customer purchases or uses a service, few tangible cues exist on which they may base their evaluations. Thus, the consumer must rely on other cues when making a quality decision.

To date, service quality is the single most researched area in the services marketing literature (Fisk, Brown, & Bitner, 1993). Since the 1980's, many researchers have worked to provide a definition and measurement foundation for the service quality concept. Service quality can trace its roots to early conceptual works from Europe (Gronroos, 1983; Lehitnen & Lehitnen, 1982) and to customer satisfaction theory (Oliver, 1980).

3.3. Dimensions of Service Quality

The assessment of quality in terms of services varies considerably from the quality assessment of concrete products. The evaluation of the quality of service requires expressing a complex conception and dealing with many different dimensions together. When assessing the quality of service, everything needs to be taken into account before considering customer expectations. Because customer expectations are of great importance in quality evaluation. The level of satisfaction obtained according to the forecast determines the service quality. In case of inequality between expectation and satisfaction, the quality of service may be inadequate or sufficiently satisfactory, and satisfaction with expectation and satisfaction may be the case. If the service provided is larger than the satisfaction expectation obtained, the service quality exceeding expectations is reached. If the level of satisfaction obtained after the service provided is below the expectations, the service quality will be low in such a case.

"Finally, if the expectation and the satisfaction level of service provision are equal to each other, then the service quality that meets the expectations is achieved" (Fitzsimmons and Fitzsimmons, 2004). Dimensions of service quality; Reliability, responsiveness, assurance, empathy, and physical entities. The quality of service perceived based on the gap between expected and perceived quality in assessing service quality is assessed according to this gap or equality. Expected and perceived quality of service influences oral communication, personal needs and past experience spreading

among service-related customers. Finally, three situations arise in perceived quality of service. These; The situation in which the expected service expresses the expectation of exceeding the expectations is under the perceived service, the expected service which shows the satisfaction of the expectation is equal to the perceived service and the expectation which is expected in case the expected service exceeds the perceived service.

3.4. Measurements of service quality in retail sector

"Researchers and managers of service organizations agree that service quality involves a comparison of expectations with performance. Gronroos contends that consumers compare the service they expect with perceptions of the service they receive in evaluating service quality" (Gronroos, 1982). "Satisfaction of services is connected to confirmation or disconfirmation of expectations. Their research is based on the disconfirmation paradigm, which confirms that satisfaction is connected to the size and direction of the disconfirmation experience, where disconfirmation is related to the person's primary expectations" (Smith and Houston, 1982).

"Service quality is a measure of how well the delivered service level matches customer expectations. Delivering quality service means conforming to customer expectations consistently." (Lewis and Booms, 1983)

"The concepts of perceived service quality by developing a comprehensive measurement know n as SERVQUAL." (Parasuraman, Zeithaml and Berry, 1985)

"They applied exploratory research from executives and consumer focus group interviews to define and model the concept of perceived service quality. They confirmed that customers evaluate the functional aspect of service quality during service delivery." (Parasuraman, Zeithaml and Berry, 1985)

"Parasuraman, Zeithaml and Berry developed SERVQUAL to study customers' perceptions of the service they received versus their expectations as a measure of customer satisfaction. The perceptions-expectations gap is the difference in the predicted service as compared to the service received. They conclude that service expectations are the result of both experiential and non- experiential factors." (Parasuraman, Zeithaml and Berry, 1988)

"Parasuraman, Zeithaml, and Berry (1985, 1988) proposed a service quality model after extensive interviews with executives of nationally recognized companies and focus groups. They used SERVQUAL as the instrument for measuring perceived service quality, and discussed five quality dimensions of SERVQUAL as tangibles, reliability, responsiveness, assurance, and empathy. They identified five specific gaps or discrepancies in the service delivery process affecting a consumer's evaluation of the service experiences. Parasuraman, Zeithaml, and Berry studied the difference between one's expectations of a service compared to the service experience. They found that a customer's assessment of overall service quality depends on the gap between expectations and perceptions of actual performance levels." (Parasuraman, Zeithaml, and Berry, 1988)

"Cronin and Taylor and Peter, Churchill, and Brown observe three problems in using SERVQUAL. First, it is difficult to explain the difference in score between expectation and perception in measurement perception. Second, the difference in score between expectation and perception should represent perceived overall quality. Third, the Gap theory of SERVQUAL raises many questions about the true factor structure of service quality construction." (Cronin, Taylor and Peter, 1992, Churchill, and Brown, 1993)

"Cronin and Taylor and Teas report that SERVQUAL offers a well- documented and multidimensional approach for measuring service quality by using a different score approach. Babakus and Boiler (1992), Carman (1990), and Cronin and Taylor (1992) believe that measuring perceptions after the service experience is more valuable than measuring expectations and perceptions of the experience." (Cronin, Taylor and Teas, 1992)

The element of service quality that has received the most attention is the expected service-perceived service gap acknowledged by Parasuraman, Zeithaml, and Berry (1985), which can be defined operationally in terms o f a "perceptions- minus expectations" (P-E) measurement framework.

The formula for computing quality is as follows:

Quality = Perception − Expectation

Parasuraman, Zeithaml, and Berry (1985) distinguish the differences between matching customers' expectations and perceptions. They define perceived service quality using three equations:

Expectations of service quality are exceeded or quality exceeds expectations.

$$PS > ES \text{ or } PS - ES > 0$$

Expectations of service quality are met or quality is acceptable.

$$PS = ES \text{ or } PS\text{-}ES = 0$$

Expectations of service quality are not met or quality is unacceptable.

$$PS < ES \text{ or } PS\text{-}ES < 0$$

Tustin states, "there is not presently available a universally accepted concept of service quality that adequately defines service quality or reflects the differences that must be considered in managing service quality, as opposed to goods quality" (Tustin states,1992). "The results confirm the effectiveness of using quality dimensions and expectations and perceptions gap analysis to operationalize service quality. Furthermore, the findings provide insight into the relationships among customers' overall quality rating of a service, customers' expectations and perceptions of a service, the type of customer considered, service provider understandings of those expectations and perceptions, and service provider hierarchical level." (Tustin states, 1992).

"Service quality is more difficult for the customer to evaluate than goods quality. Service quality perception results from a comparison of customer expectations with the actual performance. Quality evaluations are not made solely on the outcome results but on an involved evaluation of the process of service delivery" (Pyo states, 2001).

3.5. Customer Satisfaction

The consumer loyalty idea is generally new. Despite the fact that consumer loyalty is based on the center advertising administration logic, for some associations, the hostility of different showcasing exercises, essentially deals and advancement, has prompted to the genuine idea being lost. The idea is progressive and has prompted to an entire writing being created, in light of the fact that it takes advertising administration back to its underlying foundations (Vranesevic, Vignali, & Vignali, 2004). Albeit seeing

how to streamline the promoting blend from an industry-particular viewpoint is still essential, it is similarly vital to see how esteem is made, through various examined segments including item quality, service quality, valuing, and encounter quality.

"Many researchers define consumer satisfaction as a post choice evaluative judgment that concerns a specific purchase decision on a product or service that has been given an existing pre-purchase expectation" (Bearden & Teel, cited in Theodoridis & Chatzipanagiotou, 2009; Bloemer & DeRuyter, 1998; Getty & Thompson, 1994; Oliver, cited in Caruana, 2002; Vavra, 1997). "Additionally, Rust and Oliver (cited in Sivadas and Baker-Prewitt, 2000) stated that consumer satisfaction is a cognitive or affective reaction to a single or prolonged set of service encounters." (Rust and Oliver, 2000). "Customer satisfaction has been linked to sales performance, customer retention, and loyalty." (Wong and Sohal, 2003).) "Consumer's overall satisfaction with a transaction is based on three components: product quality, pricing, and service quality. Indeed, if all three of the components are in place this could then influence satisfaction."(Zeithaml, 2009, Bei and Chiao, 2001, and Sanchez-Fernandez and Iniesta-Bonillo, 2007)

"Customers judge the quality of a product or service based on their perceived expectations, which can lead to customer satisfaction and loyalty. Consumer perceived expectations is the expected performance or standard of a product or transaction based on price or previous experience. For example, some customers base their purchasing decisions on intrinsic cues to the product such as physical characteristics (e.g., color, size) to judge product quality. In addition, extrinsic decisions can be made based on brand name, packaging, pricing, and even peer pressure. It should also be considered that the pricing of a product can determine the perceived quality of the product or service. For instance, a product with a higher price is perceived to be of a higher quality than of a product that is of a lower price, which is seen to be inferior." (Schiffman and Kanuk, 2004)

"Perceived product value is defined as the trade-off between the producer's perceived benefits (or quality) and the perceived sacrifice (monetary and nonmonetary) to acquire the product. Schiffman and Kanuk (2004) state that a number of studies have shown that consumers rely on price as an indicator of product quality and that their characteristics such as income and age can affect the perception of value, which is based

upon the price/quality relationship. Hence, some realize that a lower priced product may infer that it is of a reduced quality." (Ryding, 2011)

"It can be difficult for consumers to evaluate the quality of services in comparison to when evaluating the quality of products. This is because service quality is intangible and variable. Hence, Schiffman and Kanuk suggested that consumers rely on extrinsic cues to evaluate service such as the store environment, ease of locating items, the pleasantness of the checkout assistants, staff packing systems, and general staff engagement and interaction." (Schiffman and Kanuk, 2004)
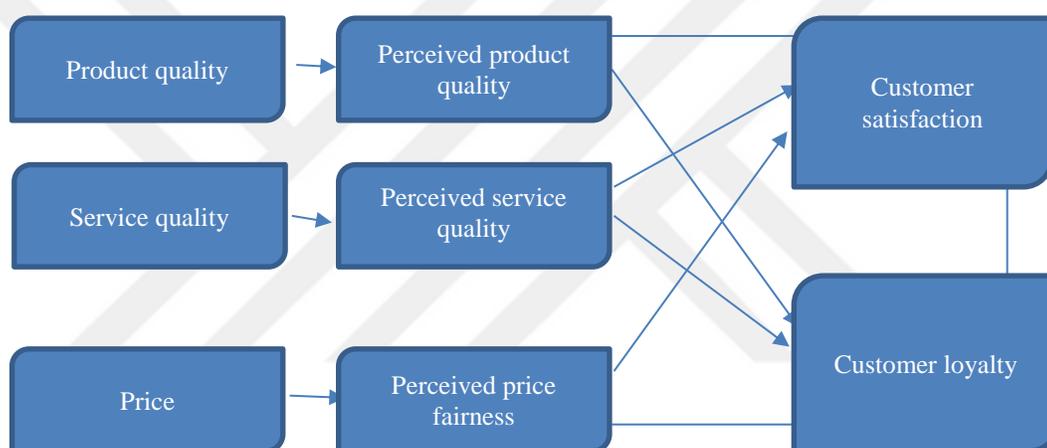
Figure 3.5.1 Product quality, service quality and price affect on customer satisfatiction and loyalty (Bei and Chiao, 2001)

3.6. Service quality and customer satisfaction

Service quality has gotten impressive consideration. (Lien, 2008). "This is due to the reason that the quality of goods can easily be measured by taking into account the certain physical properties; the measurement for services is rather difficult because the quality in this case depends on large number of factors." (Aga, 2007). "Several studies report that quality's effect on customer satisfaction is often seen as greater than other antecedents" (Churchill and Suprenant, 1982; Oliver and DeSarbo, 1988; Anderson and Sullivan, 1993). "Furthermore, Cronin and Taylor, concludes perceived service quality leads to customer satisfaction which in turn, has a significant effect on purchase intentions."(Cronin and Taylor, 1992). "The positive effect of perceived service quality

on behavioral intention." (Boulding and Zeithaml, 1993) "Expectations and delivered service influenced perceived service quality, which in turn, has an impact on behavioral intentions such as willingness to provide favorable word of mouth and engage in repeat business" (Bernhardt, 2000).

"There is also a controversy regarding the relationship between customer satisfaction and service quality. Some authors reported that relationship exist between customer satisfaction and service quality" (Oliver and DeSarbo 1988; Parasuraman, Zeithaml, and Berry 1994). "Some posit that service quality is important antecedent of customer satisfaction" (Parasuraman et al. 1988; Churchill and Suprenant 1982). "Some other argues that customer satisfaction is an antecedent of service quality. Finally, it is agreed that customer satisfaction is broader construct than service quality, so service quality assumed to be an important antecedent of customer satisfaction." (Asian Journal of Business and Management Sciences, Vol. 1 No. 1).

3.7. Employee Role to service quality

"Much of the services marketing literature have focused on providing external customers with quality services" (Gremler, 1995). "Organizations depend on their employees to be in tune with the needs of their customers for purposes of designing and delivering services or products." (Young, 2009). "The needs of the customer are second to employee needs, because customer needs will be satisfactorily met only when employee needs are being satisfactorily met" (Gremler, 1995).

Workers are imperative and indivisible part of the association and have been gotten impressive consideration by both academicians and experts. Workers in an administration association fill in as delegates of both the association and their items or administrations to the client (Chigozirim, 2008) in charge of making an incentive for clients and conveying fabulousness in service quality. (Judd, 2003; Hartline, 1996)

3.8.Quality management and supply chain management relations in food industry

In the food industry, there have been major changes in supply chain management over the past 35 years. Food Supply Chain Management has become an important strategic issue in the new millennium when businesses come to terms with cost reductions in the 20th century. "One of the most important goals of food businesses, like other businesses, is to combine purchasing, shipping, physical distribution and logistics, which allows the operator to keep the economy at a certain scale." (Bourlakis ve Weightman, 2004)

"The length or difficulty of the supply chain depends on the nature of the products, the source, the legal compliance with the food safety, and the quality assurance and distribution after production. Managing the supply chain affects quality and compliance and therefore has a direct impact on cost and service. Distribution management is not as simple as hiding the product from one place to another." "One of the most important decisions is to adjust the proper heat regulation for the food. Keeping food in proper temperature will affect shelf life. Food that changes in temperature can cause customers to become sick or die. The appropriate heat levels of various food groups are very diverse. Supply chains are becoming more and more important for the consumer's health for foods that need to be controlled by heat." (Bourlakis ve Weightman, 2004)

3.8.1. Choose of supplier

Businesses are following a variety of ways in selecting suppliers. These are Proposal evaluation, technological competence, joint value creation and strategic alliance. (Gündüz ULUSOY ve d.: Makine İmalatı Sektöründe İş Mükemmelliği ve Elektronik İş Stratejileri, (İstanbul: TÜSİAD Rekabet Stratejileri Dizisi-8, 2002). In these last two applications, buyer and supplier relations have been set to medium or long term perspective. Here, different strategies are being developed depending on whether the suppliers are larger than the buyer enterprises and whether they are producers. In addition, suppliers may be the subcontractor of the buyer's business. In such cases,

customer operations can easily affect them. Sometimes suppliers can be much larger than businesses. In such cases, it is not possible for buyer firms to influence their suppliers' practices. The supplier selection of customer enterprises plays a role in determining the competitive strategies. When choosing suppliers, companies evaluate the criteria of price as well as conformity to technical specifications, co-operation, reliability of delivery and technical experience and knowledge accumulation. The material supplied to the buyer and the supplier also shapes. There is no need to go to strategic alliance for standard materials that are readily available from many sources. However, intermediate or long-term strategies need to be applied in the purchase of investment goods and intermediate goods.

3.8.1.1.Proposal evaluation

The selection of suppliers is based on an assessment of only received bids for individual purchases. The buyer and the supplier are focused on getting a related product or service and are limited to the purchase activity. Price is the main selection criterion. This is more of an application for standard raw material purchasing.

3.8.1.2.Technological Competence

Technological competence is to look at the supplier's technical capabilities, primarily the supplier choice and its relationships. If the supplier operator is smaller than the customer, these enterprises may enter medium or long term cooperation on a technology basis. Businesses can go outsourcing and involve suppliers with processes related to setting up some technology infrastructure.

3.8.1.3.Joint Value Creation

Another choice criterion is the creation of mutual value, where the receiving business and the supplier have short or medium-term initiatives that will benefit both sides within the interest group.

3.8.1.4.Strategic Cooperation

It is a more common practice in enterprises implementing Total Quality Management philosophy. Strategic cooperation is a long-term, comprehensive cooperation that will benefit both parties in the target union of the buyer and supplier businesses. Activities are not limited to purchases. The natural end result of this application is to reduce the number of suppliers and to engage deeper with a small number of suppliers. Products are collaborating with suppliers during the design and commissioning phase. Both parties are working together to improve their processes.

3.8.2. Improvement of supplier

They are activities that support improvement efforts by the supplier to improve supplier quality. Examples of these activities include providing training and technical support, sharing information and technical expertise, awarding success and ensuring effective communication between teams. In addition, the enterprise should be proactive in its supplier development activities.

3.8.3. Integration of supplier

Provide quality improvements by managing joint development activities with the supplier. Unlike supplier development, supplier integration is a joint effort. Both the buyer and the supplier contribute to this work. The transcendent component of provider reconciliation is the sharing of key data and advantages all through the store network, the making of a typical mission with providers, the foundation of long haul purchaser provider associations with common certainty and, thus, the decrease in the quantity of providers.Both sides manage activities that solve common problems to improve quality. Benefiting from the cooperation with the supplier requires time and investment for both the supplier and the main business. Therefore, careful steps must be taken in the selection of the supplier.

3.8.4. Quality management and supplier relations

Continuity and compliance with suppliers are very important because one of the main factors affecting quality is material. It is important to ensure that the supplied material conforms to the desired quality characteristics and that the correct measurements are made to reduce the cost of poor quality. One of the priorities of producing quality products is to provide quality input. This can only be achieved as a result of common quality improvement activities undertaken with the enterprises providing products and services to the business.

Supply chain have to set up correctly. Enterprises in the supply chain do not see each other as totally foreign organizations, see them each other as a part of the same company. These businesses inform each other about the use of quality-related tools and techniques, and sometimes they also decide to use them as contractual obligations. Hence, quality management is a management style that must be in all enterprises that make up the supply chain. The failure of any one of the enterprises to reduce this reduces the supply chain to the competitive power. Therefore, these factors are important for supplier selection and cooperation continuity. Quality management is a management style that goes beyond the quality control that audits the performance of the product after production and integrates the design, operation, fulfillment of logistics activities and control of the results in order to achieve the desired results.

Since communication in the supply chain is very important, enterprises providing input are established close to the main industrial operation. Thus, face-to-face relationships among businesses are increasing and team spirit is formed. In such an environment, the pace of new product offerings is also increasing. In quality management it is foreseen to work with fewer and better suppliers as Deming suggests. Because now businesses understand that suppliers have quality competition, not price competition. Suppliers think that when the other suppliers come out at low prices, the customer enterprises will enter into commercial relations with it. It is impossible to talk about long-term relations based on trust here. In addition, suppliers are not informed about all processes. Customer business is always fearful of the disclosure of trade secrets. The other negative aspect of working with many suppliers is the possibility of non-

compliance of the supplied intermediate parts. Differences in parts from different suppliers are certain. It is impossible to reach zero fault. When working with fewer suppliers, suppliers have knowledge of the processes and the possibility of incompatibility is low because the parts come from fewer sources.

The best performance of an enterprise depends on establishing mutually beneficial relationships based on trust, sharing of knowledge, and integration.

3.9. Customer focused supply chain management

Customer service quality is influenced by the entire supply chain including logistics service suppliers. This is the reason the chain structure, the need of key business union among production network members and the requirements of an institutional structure, it must be a structure that conveys an exceptional way to deal with coordinations client benefit in the inventory network.

3.9.1. Objectives of supply chain that focusing to customer

"The main objectives of the supply chain management, one can easily notice that they all have implications related to customer service. The following features are mentioned most often:

1. Reduced order lead time;
2. Ensured reliability, proper frequency, quality and flexibility of deliveries;
3. Optimized stock level within the entire supply chain;
4. Minimized total costs of goods flow."(Długosz, 2010)

"Objectives no. 1 and 2 are actually the fundamental objectives of the logistic customer service. Objective no. 3 pertains to stock optimization, not minimization, meaning that stock management may not be treated as an autonomous activity, but the stock level must be flexibly adjusted to match customer preferences, as it determines the availability of goods. Minimized total costs of goods flow, in turn, must always be confronted with the level of delivery service, as this is the basic trade-off of the whole logistics system." (Długosz, 2010).

"It should be noted that individual companies in the supply chain are suppliers and customers at the same time. Every supplier is a customer of another supplier, which means that they must all operate on two markets. They form part of the sales market as customers, whereas as suppliers, they operate in the field of procurement. Every company in the supply chain must listen to the signals from the customers' market." (Długosz, 2010).

3.9.2. Integrated logistics management that focusing the customer

After 1980's, concepts of competition and quality development became very important. In this period, enterprises were pursuing the main management philosophy such as JIT and total quality management (TQM). Businesses have sought new concepts that they can use in their businesses to improve the quality, lower price, and product development and delivery time of the pace, more flexible and simpler production processes. Within this new competitive landscape, businesses do not give importance to it before; But they have taken into account the integration of logistics services they now know they can use as a competitive advantage with the changing world.

The concept of integrated logistics is not so different from the concept of logistics, but it can be generally defined as follows; Process of anticipating customer needs and wants, acquiring the capital, materials, people, technologies and information necessary to meet those needs and wants, optimizing the goods-or-service-producing a network to fulfill customer request, utilizing the network to fulfill customer request in a timely way.

We can list the factors that cause the enterprises to switch to integrated logistics management as follows.

1. Increase in capital availability cost
2. Demand for advanced customer service
3. Developments in computing and communication technologies,
4. Developments in international trade.

3.9.3. The impact of cost-based SCM to customer relationship strategies

Businesses are focusing on two major issues in view of the increasing competition today. For these reasons, the costs for selling their products at the price they want, the other is to increase sales on the basis of marketing studies. As a result of the researches carried out, logistics costs were found to be around 8% of the product. This rate is second in product costs after purchasing 30%.

This high cost area is a potential area for cost containment. As a result, companies are increasingly paying more attention to this area. An effective procurement network provides cost reductions while at the same time reaching potential customers in different locations and making them available customers. Supply chain management is an effective tool that creates a lasting strategic advantage that will reduce logistics costs without reducing customer satisfaction.

3.10. The Effects of time-based supply chain strategies

Vital objectives that have been connected to benefit share as of not long ago are presently connected to the significance of customer service level commitment in the store network. In the event that any of the choices identified with the supply chain operation are taken without considering the requirements of the client, it will harm the execution of the general systems of the production network.

Superior quality, technological performance, distribution and low cost do not guarantee the success of the supply chain. Businesses now see that they need to compete against time. Both individual firms and supply chain firms must be able to compete in all these areas and deliver products and services to their customers as soon as possible. Shortening the delivery time of the final customer product or service is a force that pushes operations to implement supply chain management. Appropriation of store network administration is a method for decreasing the process durations when the materials are conveyed to the last client in the chain.

3.10.1. Quick response

The history of supply chain development began with a rapid response in the textile industry (QR-quick response) and then continued with the ECR-efficient consumer response in the food industry. The quick response is to focus on shortening the retail order cycle. The retail order cycle is known as the time required to reach the final warehouse from the first production point of the goods. The time between ordering and taking delivery of goods is shortened by the use of technology. Barcode and electronic data exchange, which are automatic recognition of products, are the basic technologies used. With these technologies, order creation and ordering stages are automated, which takes a long time in order cycle time. The use of this technology requires joint teamwork between both the manufacturer and the retailer. Therefore, "strategic partnerships" are established between retailers and producers who adopt the quick-response strategy.

3.10.2. Efficient customer response

It is a strategy that focuses on shortening the retail order cycle in the food industry in parallel with the time-based rapid response strategy in the textile industry. The time between the ordering of the goods and the receipt of the goods is restricted by the use of technology. Barcoding and electronic data interchange (EDI), which are automatic recognition of products, are the basic technologies used.

ECR is based on fast-response techniques. But the scope is broader. It does not stay with only the specified order cycle; as well as various business processes including new product introductions, product range and promotions.

It is a supply chain strategy that influences the price sensitivity and satisfaction of the customer.

3.10.3. Cycle time

The period required to complete one cycle of an operation; or to complete a function, job, or task from start to finish. Cycle time is used in differentiating total duration of a process from its run time.

3.10.4. Lead time

Procurement period is from customer's point of view only until delivery to order. This is clearly a crucial competitive variable for markets that are becoming increasingly competitive over time. As is the case for the customer, it is the way for the supplier to translate the order into cash. It is the total time that the business capital has worked up to the time the customer actually paid the material when it was supplied.

4. IMPROVEMENTS & CHANGES

In the stores something has been changed and improved to change customer perception and to attract more customers to store. Also some displays, shelves and stands have changed to see more and to be focused. On the other hand market sign and the general image have been changed. In this thesis statement, I search how these changes effected the sales. All these changes is telling below;

4.1. Shelves, displays, locations

In general, shelves changed completely, the size of shelves expanded, the height of some shelves have lowered and some of them is displayed different location in the store.

Some products display numbers have increased, some of them have a place with pallet, which is called Düsseldorf pallet is smaller, under the shelves to place and show more of them and provide always available in the store also reduce workforce of employee, they come from distribution center with pallet, personnel doesn't need to handle product to put it its shelf, it is putting with pallet.

Some products exposed in the market with pallet in some corner of the store, its location may change in the other store of the chain. Promotion products are displaying in the basket in the points where the customer is most frequent of the customer in the store, for example on the checkout way, near the indispensable products, in the entry etc.

4.2. Vegetable, Fruit and Bread Stands

Vegetable, fruit and bread stands were demoded and poor quality. Vegetable and fruit stands were made with black slim iron and green awning in front of the small stands and it was movable with two small tire. Also bread shelves were resistless yellow sheet metal, rack feet were thin and long to shown in eye level.

After changes all stands were made with wood with fine colour. It is seen in high quality. The sizes expanded the height of vegetable and fruit stand raised to waist level. Mirrors were placed over the vegetable and fruit stands to show more products and it's

also show more colourful with products colour. Bread stand expanded, sliding glass cover added to make more hygienic and added some shelf for bakery products (cookies, grissini etc.).

4.3. Product Brands

Some private label products brands have been changed especially in legumes to show fine quality with a new brand. While changing the brands nothing had been changed, same product quality, same producer, and same material, same quantity in packages. Only the purpose was increase the sales capacity of products.

4.4. Market sign

The background was pale and the logo was like a sticker on sign, also market slogan was written under the logo. The new sign is designed with vivid color background, embossed logo without slogan and the logo is placed in the middle of background in greater form. The look of market is now more remarkable.

4.5. General image

In general the exterior view has been changed with market sing, after the door open the entrance has changed with vegetable, fruit and bread stands with a higher quality after the view of products has changed with instant availability stock on the shelves. In all changes are for new and more customer and more sales, customer's thought can be changed.

The questionnaire have been done for evaluation of awareness of customer with the changes.

5. DATA ANALYSIS

5.1. Methodology

5.1.1. Data

Data obtained from the data base of XYZ Retail Company* in the time period of last 11 month of 2015 and first 11 month of 2016. The data we obtained from the data bank were tested for hypothesis.

Since the changes started in the first month of 2016, previous 11 month and subsequent 11 month's data have tested.

The survey was made for supportive purposes.

5.1.2. Variables

Research Scheme;
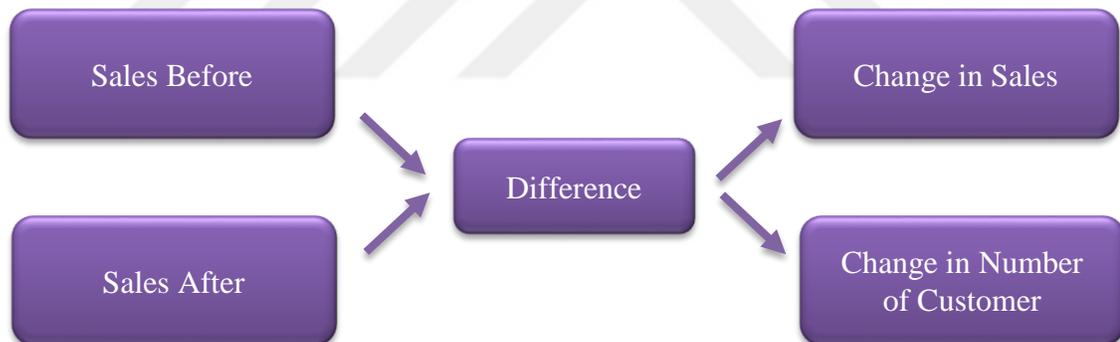
Figure 5.1.2.1 Research scheme

Var 1: Before the changes

Var 2: After the changes

*the name of the company was not revealed for privacy

5.2. Hypotheses

H1: Fruit and vegetable stands display affected sales of fruit and vegetable

H0 is rejected, H1 accepted p value for fruit stand is 0.001<0.05 also p value for vegetable stand is 3.6002E-7<0.05 with a 95% confidence interval. The 29 store's sales of fruit and vegetable has examined fruit sales remain 41,4% from the value 6882 to 9732.2759 and vegetable sales remain 64% from the value 6488.207 to 10641. The statistic test show us to the increase significant. The stands change and improvement resulted in a successful conclusion. Consequently fresh food display way is very important, customer make decision to buy or not just with image. The vegetables' image for sales more important than fruit because its sales increased more. Customer think with a new view fruits and vegetables are in high quality, fresher and more purchasable. With a new mirror which is take place above the stand and with a wider wooden stands products can be seen fresher and seem to have more therefore customer buy more and they buy the other kinds that they didn't buy earlier view of the stands and products. They have bought the kind from the competitor retailer because of just view after the changes and improvements they started to buy them from the stores, and customer number increased with a new view.

Fruit stand statistics;

Table 5.2.1

Fruit sales t-test analyze

Table 5.2.1.A

Fruit sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BeforeChangesFruitStand Display	6882,0000	29	4072,47946	756,24045
	AfterChangesFruitStandD isplay	9732,2759	29	5339,57956	991,53503

Table 5.2.1.B

Fruit sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	**BeforeChangesFruitStand Display & AfterChangesFruitStandD isplay**	29	,641	,000

Table 5.2.1.C

Fruit sales t-test paired samples test

			Pair 1
			BeforeChangesFruitStandDisplay - AfterChangesFruitStandDisplay
Paired Differences	**Mean**		-2850,27586
	Std. Deviation		4147,35748
	Std. Error Mean		770,14495
	95% Confidence Interval of the Difference	**Lower**	-4427,84628
		Upper	-1272,70545
t			-3,701
df			28
Sig. (2-tailed)			,001

Vegetable stand statistics;

Table 5.2.2

Vegetables sales t-test analyze

Table 5.2.2.A

Vegetables sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BeforeChangesVegetable StandDisplay	6488,2069	29	4233,63902	786,16703
	AfterChangesVegetableS tandDisplay	10641,0000	29	6179,23707	1147,45552

Table 5.2.2.B

Vegetables sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	BeforeChangesVegetable StandDisplay & AfterChangesVegetableS tandDisplay	29	,854	,000

Table 5.2.2.C

Vegetables sales t-test paired samples test

		Pair 1 BeforeChangesVegetableStandDisplay - AfterChangesVegetableStandDisplay
Paired Differences	**Mean**	-4152,79310
	Std. Deviation	3383,07987
	Std. Error Mean	628,22216
	95% Confidence Interval of the Difference Lower	-5439,64786
	Upper	-2865,93834
t		-6,610
df		28
Sig. (2-tailed)		,000

H2: Bakery products shelves and cabinet quality show them hygienic and affected sales

Sales before the changes and after the changes have been analyzed statistically in 29 shops and paired samples t-test show that H0 is rejected with a 95% confidence interval, H2 accepted. P value is 3.4243E-10<0.05.

The outlook of the bakery shelf is very important to show the product more hygienic and make them purchasable. The mean sales 27% increased from 5107.2069 to 6980.7586.

Table 5.2.3

Bakery sales t-test analyze

Table 5.2.3.A

Bakery sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**BeforeChangesBakery ProductsStand**	5107,2069	29	2272,17774	421,93281
	AfterChangesBakery ProductsStand	6980,7586	29	2745,68471	509,86085

Table 5.2.3.B

Bakery sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	**BeforeChangesBakery ProductsStand & AfterChangesBakery ProductsStand**	29	,926	,000

Table 5.2.3.C

Bakery sales t-test paired samples test

			Pair 1 BeforeChangesBakeryProducts Stand - AfterChangesBakeryProductsStand
Paired Differences	**Mean**		-1873,55172
	Std. Deviation		1069,41862
	Std. Error Mean		198,58605
	95% Confidence Interval of the Difference	**Lower**	-2280,33681
		Upper	-1466,76664
t			-9,434
df			28
Sig. (2-tailed)			,000

H3: The quantity of product display on the shelves have affected the sales of the product

Ten product have been analyzed in the 29 stores of the retail company. Ninth of them reject H0, H3 accepted, only one of them reject H3. It's show that display quantity do affect sales, customer want to buy what they see more and can remember they need it when they see the it easily on the shelf. Also when display number has been increased, possibility of out of stock on the shop has been decreasing, availability increases and the sales of product increases. With this changes customer satisfaction and service quality has increased because they can find what they want always available and easily accessible.

First product;

H0 rejected p=0.000004<0.05

H3 accepted

Sales increased 79% and it's significant.

Table 5.2.4

First product sales t-test analyze

Table 5.2.4.A

First product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	58,9655	29	34,17861	6,34681
	After	105,8707	29	56,41459	10,47593

Table 5.2.4.B

First product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,609	,000

Table 5.2.4.C

First product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	**Mean**		-46,90517
	Std. Deviation		44,73860
	Std. Error Mean		8,30775
	95% Confidence Interval of the Difference	**Lower**	-63,92282
		Upper	-29,88752
t			-5,646
df			28
Sig. (2-tailed)			,000

Second product;

H0 rejected p=0.037<0.05

H3 accepted

Sales increased 20% and it's significant.

Table 5.2.5

Second product sales t-test analyze

Table 5.2.5.A

Second product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**Before**	45,8103	29	23,51307	4,36627
	After	50,3362	29	24,81802	4,60859

Table 5.2.5.B

Second product sales t-test *paired samples correlations*

		N	Correlation	Sig.
Pair 1	Before & After	29	,895	,000

Table 5.2.5.C

Second product sales t-test paired samples test

Paired Samples Test			Pair 1
			Before - After
Paired Differences	Mean		-4,52586
	Std. Deviation		11,12597
	Std. Error Mean		2,06604
	95% Confidence Interval of the Difference	Lower	-8,75796
		Upper	-,29377
t			-2,191
df			28
Sig. (2-tailed)			,037

Third product;

H0 rejected, p=5.9851E-7<0.05

H3 accepted

Sales increased 111% and it's significant.

Table 5.2.6

Third product sales t-test analyze

Table 5.2.6.A

Third product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**Before**	1,8276	29	1,51349	,28105
	After	3,8621	29	2,11350	,39247

Table 5.2.6.B

Third product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	**Before & After**	29	,601	,001

Table 5.2.6.C

Third product sales t-test paired samples test

		Pair 1
		Before - After
Paired Differences	Mean	-2,03448
	Std. Deviation	1,70703
	Std. Error Mean	,31699
	95% Confidence Interval of the Difference — Lower	-2,68380
	95% Confidence Interval of the Difference — Upper	-1,38516
t		-6,418
df		28
Sig. (2-tailed)		,000

Fourth product;

H3 rejected, p=0.317>0.05

H0 accepted.

Sales decreased 4% and it's not significant.

Table 5.2.7

Fourt product sales t-test analyze

Table 5.2.7.A

Fourt product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	152,1379	29	59,85144	11,11413
	After	146,0603	29	48,72108	9,04728

Table 5.2.7.B

Fourt product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,844	,000

Table 5.2.7.C

Fourt product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	Mean		6,07759
	Std. Deviation		32,14630
	Std. Error Mean		5,96942
	95% Confidence Interval of the Difference	Lower	-6,15021
		Upper	18,30538
t			1,018
df			28
Sig. (2-tailed)			,317

Fifth product;

H0 rejected, p=3.8809E-8<0.05

H3 accepted

Sales increased 74% and it's significant.

Table 5.2.8

Fifth product sales t-test analyze

Table 5.2.8.A

Fifth product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	14,4483	29	5,57793	1,03580
	After	25,1293	29	10,75532	1,99721

Table 5.2.8.B

Fifth product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,729	,000

Table 5.2.8.C

Fifth product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	Mean		-10,68103
	Std. Deviation		7,69853
	Std. Error Mean		1,42958
	95% Confidence Interval of the Difference	Lower	-13,60940
		Upper	-7,75267
t			-7,471
df			28
Sig. (2-tailed)			,000

Sixth product;

H0 rejected, p=0.009<0.05

H3 accepted

Sales increased 13% and it's significant.

Table 5.2.9

Sixth product sales t-test analyze

Table 5.2.9.A

Sixth product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	48,4828	29	20,32876	3,77496
	After	54,6293	29	25,16283	4,67262

Table 5.2.9.B

Sixth product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,887	,000

Table 5.2.9.C

Sixth product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	**Mean**		-6,14655
	Std. Deviation		11,78689
	Std. Error Mean		2,18877
	95% Confidence Interval of the Difference	**Lower**	-10,63005
		Upper	-1,66306
t			-2,808
df			28
Sig. (2-tailed)			,009

Seventh product;

H0 rejected, p= 6.9858E-8<0.05

H3 accepted

Sales increased 51% and it's significant.

Table 5.2.10

Seventh product sales t-test analyze

Table 5.2.10.A

Seventh product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	95,8621	29	35,50456	6,59303
	After	144,8534	29	46,55548	8,64514

Table 5.2.10.B

Seventh product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,635	,000

Table 5.2.10.C

Seventh product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	Mean		-48,99138
	Std. Deviation		36,43533
	Std. Error Mean		6,76587
	95% Confidence Interval of the Difference	Lower	-62,85064
		Upper	-35,13212
t			-7,241
df			28
Sig. (2-tailed)			,000

Eighth product;

H0 rejected, p=0.002<0.05

H3 accepted

Sales increased 25% and it's significant.

Table 5.2.11

Eighth product sales t-test analyze

Table 5.2.11.A

Eighth product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**Before**	106,7241	29	48,09135	8,93034
	After	133,6983	29	55,80116	10,36202

Table 5.2.11.B

Eighth product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	**Before & After**	29	,663	,000

Table 5.2.11.C

Eighth product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	Mean		-26,97414
	Std. Deviation		43,22023
	Std. Error Mean		8,02579
	95% Confidence Interval of the Difference	Lower	-43,41423
		Upper	-10,53404
t			-3,361
df			28
Sig. (2-tailed)			,002

Ninth product;

H0 rejected, p=0.000008<0.05

H3 accepted

Sales increased 20% and it's significant.

Table 5.2.12

Ninth product sales t-test analyze

Table 5.2.12.A

Ninth product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	661,7931	29	247,16744	45,89784
	After	795,8707	29	292,49285	54,31456

Table 5.2.12.B

Ninth product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,893	,000

Table 5.2.12.C

Ninth product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	Mean		-134,07759
	Std. Deviation		132,56712
	Std. Error Mean		24,61710
	95% Confidence Interval of the Difference	Lower	-184,50342
		Upper	-83,65175
t			-5,447
df			28
Sig. (2-tailed)			,000

Tenth product;

H0 rejected, p=0.034<0.05

H3 accepted

Sales increased 24% and it's significant.

Table 5.2.13

Tenth product sales t-test analyze

Table 5.2.13.A

Tenth product sales t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	7,3103	29	3,84618	,71422
	After	9,0862	29	4,06656	,75514

Table 5.2.13.B

Tenth product sales t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	Before & After	29	,416	,025

Table 5.2.13.C

Tenth product sales t-test paired samples test

			Pair 1
			Before - After
Paired Differences	**Mean**		-1,77586
	Std. Deviation		4,27949
	Std. Error Mean		,79468
	95% Confidence Interval of the Difference	**Lower**	-3,40369
		Upper	-,14803
t			-2,235
df			28
Sig. (2-tailed)			,034

H4: The brand change affected the sales of the product

Five product have been analyzed in the 29 stores of the retail company. All of them reject H0 and H4 accepted. Brand always affect the sales of product, people think brand quality affect the quality of product. It's just a psychological affect but it does work, because nothing have changed in the packages neither quality nor the quantity of product but sales do increase. This show that the improvement is successful and the image of the retailer company is growing in the eyes of the customer. Customer thought earlier product brand was not in fine quality and they didn't want to buy it but now think that with a new brand, products are in better quality and can buy them without thinking of the quality.

First product brand change affect;

H0 is rejected p=1.4056E-9<0.05.

H4 accepted

Sales increased 71%

Table 5.2.14

First product brand change affect t-test analyze

Table 5.2.14.A

First product brand change affect t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EarlierBrand	14,5172	29	5,19354	,96442
	NewBrand	24,7586	29	9,64237	1,79054

Table 5.2.14.B

First product brand change affect t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	EarlierBrand & NewBrand	29	,808	,000

Table 5.2.14.C

First product brand change affect t-test paired samples test

			Pair 1
			EarlierBrand - NewBrand
Paired Differences	**Mean**		-10,24138
	Std. Deviation		6,24874
	Std. Error Mean		1,16036
	95% Confidence Interval of the Difference	**Lower**	-12,61827
		Upper	-7,86448
t			-8,826
df			28
Sig. (2-tailed)			,000

Second product brand change affect;

H0 is rejected p=0.000005 < 0.05

H4 accepted

Sales increased 43%

Table 5.2.15

Second product brand change affect t-test analyze

Table 5.2.15.A

Second product brand change affect t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**EarlierBrand**	17,7241	29	6,76069	1,25543
	NewBrand	25,3793	29	9,96570	1,85058

Table 5.2.15.B

Second product brand change affect t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	**EarlierBrand & NewBrand**	29	,677	,000

Table 5.2.15.C

Second product brand change affect t-test paired samples test

			Pair 1
			EarlierBrand - NewBrand
Paired Differences	**Mean**		-7,65517
	Std. Deviation		7,33035
	Std. Error Mean		1,36121
	95% Confidence Interval of the Difference	**Lower**	-10,44349
		Upper	-4,86686
t			-5,624
df			28
Sig. (2-tailed)			,000

Third product brand change affect;

H0 is rejected p=0.001<0.05

H4 accepted

Sales increased 43%

Table 5.2.16

Third product brand change affect t-test analyze

Table 5.2.16.A

Third product brand change affect t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EarlierBrand	39,3448	29	27,31990	5,07318
	NewBrand	56,2759	29	41,32441	7,67375

Table 5.2.16.B

Third product brand change affect t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	EarlierBrand & NewBrand	29	,815	,000

Table 5.2.16.C

Third product brand change affect t-test paired samples test

			Pair 1 EarlierBrand - NewBrand
Paired Differences	Mean		-16,93103
	Std. Deviation		24,76739
	Std. Error Mean		4,59919
	95% Confidence Interval of the Difference	Lower	-26,35205
		Upper	-7,51002
t			-3,681
df			28
Sig. (2-tailed)			,001

Fourth product brand change affect;

H0 is rejected p=2.3045E-13<0.05

H4 accepted

Sales increased 67%

Table 5.2.17

Fourt product brand change affect t-test analyze

Table 5.2.17.A

Fourt product brand change affect t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EarlierBrand	66,4138	29	27,39202	5,08657
	NewBrand	110,6552	29	39,87057	7,40378

Table 5.2.17.B

Fourt product brand change affect t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	EarlierBrand & NewBrand	29	,917	,000

Table 5.2.17.C

Fourt product brand change affect t-test paired samples test

			Pair 1 EarlierBrand - NewBrand
Paired Differences	Mean		-44,24138
	Std. Deviation		18,36078
	Std. Error Mean		3,40951
	95% Confidence Interval of the Difference	Lower	-51,22545
		Upper	-37,25731
t			-12,976
df			28
Sig. (2-tailed)			,000

Fifth product brand change affect;

H0 is rejected p=7.1451E-11<0.05

H4 accepted

Sales increased 61%

Table 5.2.18

Fifth product brand change affect t-test analyze

Table 5.2.18.A

Fifth product brand change affect t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EarlierBrand	97,6897	29	33,91281	6,29745
	NewBrand	156,8621	29	55,20011	10,25040

Table 5.2.18.B

Fifth product brand change affect t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	EarlierBrand & NewBrand	29	,857	,000

Table 5.2.18.C

Fifth product brand change affect t-test paired samples test

			Pair 1
			EarlierBrand - NewBrand
Paired Differences	**Mean**		-59,17241
	Std. Deviation		31,43936
	Std. Error Mean		5,83814
	95% Confidence Interval of the Difference	**Lower**	-71,13131
		Upper	-47,21352
t			-10,135
df			28
Sig. (2-tailed)			,000

H5: The change of market sign have increased the number of customer of the stores

Before and after 11 months data show us to H0 is rejected, H5 accepted. The mean number of customer increased to 15800.8046 significantly. T test significance value p is 0.003 and it is smaller than 0.05. On the other hand the psychological effect on the people of the image proved. People turn to attention where they find interesting it remarkable, it can be a house, a car or even a retail store. Since the shop is now more lively and remarkable, people are becoming more frequented to stores, they start shopping from the stores who were go another retail store. The change was beneficial to gain new and happy customers with renewed service quality.

Table 5.2.19

Number of customer affect t-test

Table 5.2.19.A

Number of customer affect t-test paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**NumberOfCustomerBefore Changes**	15207,5632	29	4379,92656	813,33194
	NumberOfCustomerAfterC hanges	15800,8046	29	4567,39479	848,14392

Table 5.2.19.B

Number of customer affect t-test paired samples correlations

		N	Correlation	Sig.
Pair 1	**NumberOfCustomerBefore Changes & NumberOfCustomerAfterC hanges**	29	,977	,000

Table 5.2.19.C

Number of customer affect t-test paired samples test

			Pair 1
			NumberOfCustomerBeforeChanges - NumberOfCustomerAfterChanges
Paired Differences	**Mean**		-593,24138
	Std. Deviation		968,03009
	Std. Error Mean		179,75867
	95% Confidence Interval of the Difference	**Lower**	-961,46033
		Upper	-225,02243
t			-3,300
df			28
Sig. (2-tailed)			,003

H6: The changes have increased the sales of the stores

The 29 store's 11 months before the changes and after the changes sales has been examined and the result show that H0 is rejected, H6 accepted, t test prove it for us, p value is (1.2078E-7) smaller than 0.05 in paired sample test with a 95% confidence interval. The changes are increased the sales of stores. The mean sales increase to 187753.8621 significantly. People like the changes all in their life in home, in office, in school also the tests showed that like change in their shops. The stores new design invite to shopping to old and new customers. When people show something different want to sell it just for test in first time after if they like it, they will start to buy it from the shop. The all changes make difference for first time test, products can be seen clearly, more and available all time. Before the changes products could not be found in the store all time or couldn't be seen easily, after in new design the all problems reached the solution. Now customers more happy to shop in the stores and buy more and more products. Like I said before all effort for happy customer with this sales analyze I prove that. The customers now more happy, they prefer the chain store and they buy more kind and more quantity of the products.

Table 5.2.20
General sales t-test analyze
Table 5.2.20.A
General sales t-test analyze paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	SalesBeforeChangesInGeneral	160990,2759	29	46348,54107	8606,70801
	SalesAfterChangesInGeneral	187753,8621	29	52877,04166	9819,02013

Table 5.2.20.B

General sales t-test analyze paired samples correlations

		N	Correlation	Sig.
Pair 1	**SalesBeforeChangesInGeneral & SalesAfterChangesInGeneral**	29	,923	,000

Table 5.2.20.C

General sales t-test analyze paired samples test

			Pair 1 **SalesBeforeChangesInGeneral - SalesAfterChangesInGeneral**
Paired Differences	**Mean**		-26763,58621
	Std. Deviation		20506,01135
	Std. Error Mean		3807,87071
	95% Confidence Interval of the Difference	**Lower**	-34563,65577
		Upper	-18963,51664
t			-7,028
df			28
Sig. (2-tailed)			,000

5.3. Statistical Method Used

The t - test is a method of analysis used to compare two means. Particularly in trial-based studies it is necessary to compare pre- and post-experiment values. Apart from that, to compare the views of two or more related but different subjects of a particular group. For example, to compare an operator's performance before and after ISO 9001: 2000. Or to compare the views of teachers on the activities of "critical learning" and "multi-learning" methods. Finally, compare the project team with the democratic leadership model to the performance of another project team with traditional leadership approaches. The paired sampled t-Test is a suitable method for all these situations.

5.3.Analyses

Table 5.3.1

A sample analaysis table

Store	Mean vegetable sales before changes in 4 months	Mean vegetable sales after changes in 4 months
S1	7.125	12.041
S2	2.794	5.369
S3	16.402	20.314
S4	5.176	6.707
S5	3.458	7.009
S6	2.382	4.625
S7	13.621	13.105
S8	6.279	15.013
S9	3.054	5.142
S10	2.640	6.148
S11	6.633	11.945
S12	15.831	23.155
S13	7.422	8.070
S14	4.095	10.854
S15	4.830	6.694
S16	6.729	9.252
S17	6.056	10.898
S18	3.333	13.936
S19	10.594	17.019
S20	1.820	2.766
S21	14.775	30.990
S22	4.436	7.440
S23	2.861	4.844
S24	5.120	9.863
S25	11.207	13.822
S26	7.967	10.627
S27	2.288	6.858
S28	3.691	6.613
S29	5.539	7.470

5.4.Supplementary Questionnaire and Descriptive Analyses

Questionnaire was made with 1524 customer. The aim was to test awareness of customer for the all changes and the new design of the stores. New customers appreciate the new design of the store. The questionnaire was given in appendix 8.

First question: How long have you been to this store?

First question measure how many of them new customer, how many of them old customer.

The results in the chart show us, 50% of total customers are new customers, they have started to shop in the stores after the conversion to new desing. The other fifty percent are old customers. The changes brought new customers. The number of customers started to increase immediately after changes in stores because 14% of customer brought between 3 and 4 months. We can say that from graph 1 the majority of new customers are female customers with 27%. Old customers are usually female customers with the percantages of 21%. We can understand from the results female customers pay more attention to appearance. To sum up, increase in the number of customers has been proven in second time by the survey results, first improve was made with real data with statistical t-test analyze.
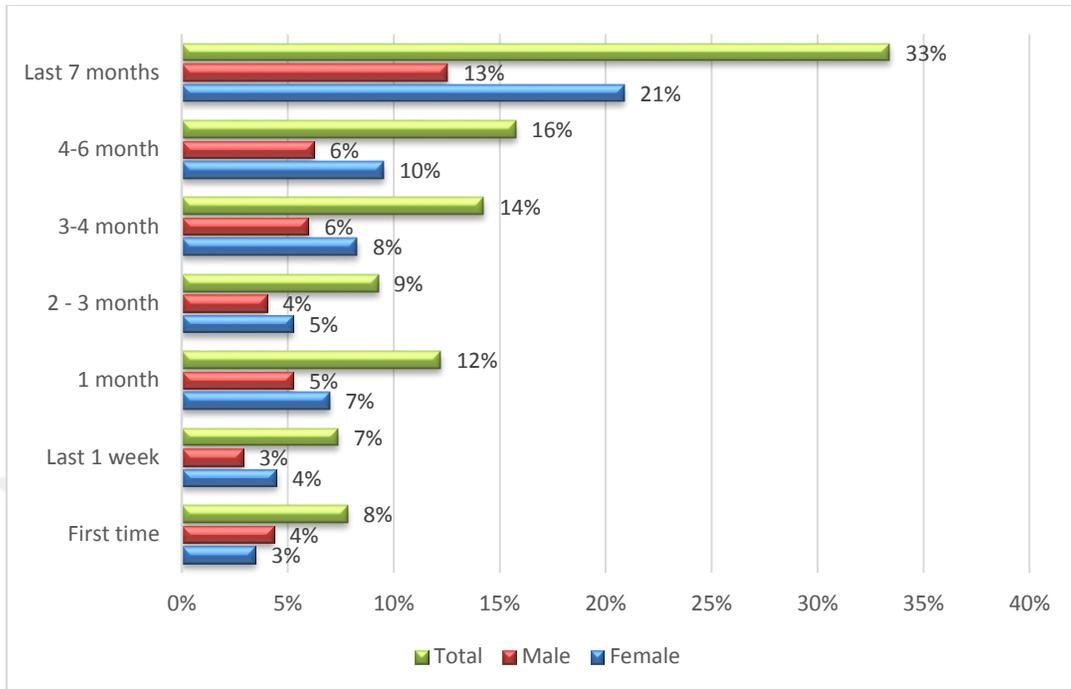
Graph 1 The analyze of customer how long have customer been to the store

Second question: Did you notice any changes in this market?

Second question measure the awareness of customer.

72 % of customer in the survey have noticed the changes in the market, the noticed 44% is female customers and 28% is male customers. Female customers' awareness is higher than the male customers, it can be seen from graph 2. 28% of customer could not distinguish the changes because they are new customers, they don't know how was the old desing of the store. The changes are affective and the aim was successfully performed, customer do notice the difference in the stores with the result of 72%. Any changes in the stores can be seen from the customer.
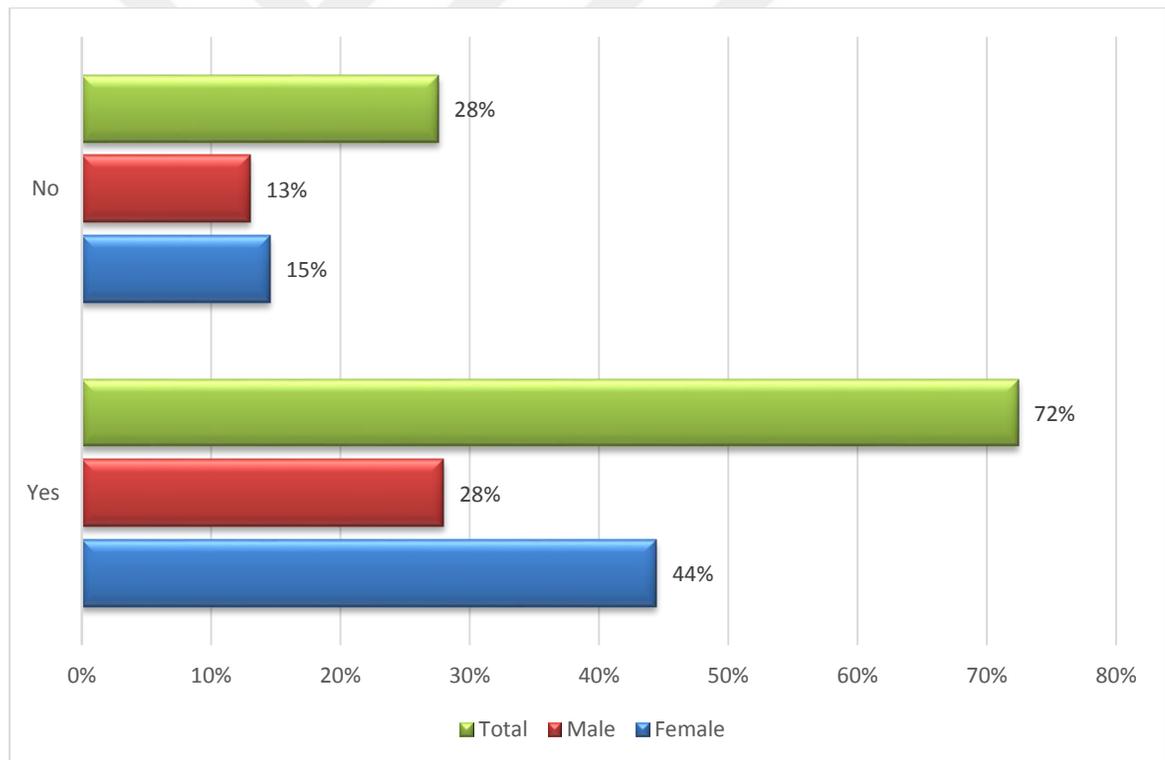
Graph 2 Awareness analysis of the changes in the store

Third question: How many points do you give to this new design of this market out of 5?

Third question measure the points from the customer's eye.

1414 customer answered the question, 40% of them, 24% of female 16% of male customer, gave 5 points from 5, and 36% of surveyor gave 4 points. 76% of customer do like the new desing of stores and the most of them female with the percentages of 45. We can say that the new desing got passing note.
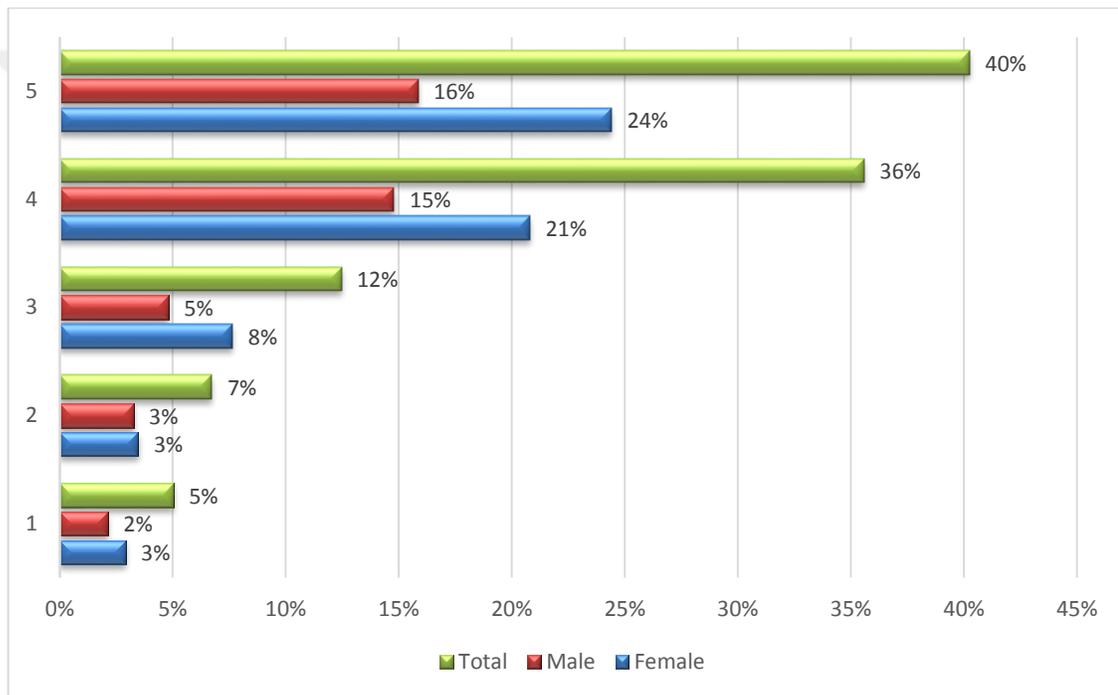
Graph 3 Analyzing the scores of the customers in the new design

To sum up to questionnaire customers liked the new desing and the changes, they can access products easily, they can find what they want on the time and more fresh. We prove that secondly changes have affective as can be seen from the answer and the graphs. I can say, all chain or small stores have to change something in their stores to achive customer satisfaction and I believe they can see smilier customer and more customer in their stores.

5.5.Results of the Analyses

Table 5.4.1

The results of hypothesis

Hypotheses	Product	Result	Conclusion
H1: Fruit and vegetable stands display affected sales of fruit and vegetable	H1 Fruits	$p<0.05$	Accepted
	H1 Vegetables	$p<0.05$	Accepted
H2: Bakery products shelves and cabinet quality show them hygienic and affected sales		$p<0.05$	Accepted
H3: The quantity of product display on the shelves have affected the sales of the product	H3 product 1	$p<0.05$	Accepted
	H3 product 2	$p<0.05$	Accepted
	H3 product 3	$p<0.05$	Accepted
	H3 product 4	$p>0.05$	Rejected
	H3 product 5	$p<0.05$	Accepted
	H3 product 6	$p<0.05$	Accepted
	H3 product 7	$p<0.05$	Accepted
	H3 product 8	$p<0.05$	Accepted
	H3 product 9	$p<0.05$	Accepted
	H3 product 10	$p<0.05$	Accepted
H4: The brand change affected the sales of the product	H4 product 1	$p<0.05$	Accepted
	H4 product 2	$p<0.05$	Accepted
	H4 product 3	$p<0.05$	Accepted
	H4 product 4	$p<0.05$	Accepted
	H4 product 5	$p<0.05$	Accepted
H5: The change of market sign have increased the number of customer of the stores		$p<0.05$	Accepted
H6: The changes have increased the sales of the stores		$p<0.05$	Accepted

6. Conclusion

Firms operating in a highly competitive environment have to develop and implement new strategies to reduce costs and service efficiently. In the eyes of customers, it has to show a difference compared to competitors' services.

Supply chain management is observed to integrate chain activity when it is examined in relation to competitive advantage. The units in the supply chain need to exchange information with each other in a timely and accurate manner. Otherwise they face problems such as excess stock, idle capacity, high production, transportation costs and increasing customer dissatisfaction.

In this competitive environment retail industry goes first, because they sell food and clothes they are ready for end user not raw material. Because of that retail industry always have to provide best service quality and customer satisfaction. At every street corner can be seen retail store and they have to do something different for more customer and more sales. For difference the chain stores have changed more thing, from shelves detail to external appearance.

The display quantity of some products increased for psychology that what can be seen more can be sold more, to avoid out of stock in t time, availability all time in store and different type of shelves, beside reduce the workload of the employee because they put some products to shelf with package or pallet, they are no need to put the products one by one to shelf. In my hypothesis and my data test show that they got success, sales of the products are increased, they can sell it to other customer more. Always available on store stock, the availability increased the sales of products and total sales of the store.

Fruits, vegetables and bakery products stands completely changed, new desing can show products more and more fresh. Customers started to buy more of them and who buys in this category have to walk through the other shelves and they buy other things, before the changes customer can refuse shopping when see the fruit and vegetables stands view. From the statistical test results, increase of sales from this category proven.

The market sign changed, now it has vivid colour and the emblem in 3D. The changes gets new customers. People see like new market to forget old style, and they started to shop from the stores, they see the prices they see the quality.

Some products brand have changed to increase the sales of the products without change the quality or the quantity in the packages. When analyze the old and new brand sales it's proved the new brand sales more. Customer think the new brand more trustworthy and better quality.

In retail industry any changes can affect the sales, any changes can affect to get new customer, better service quality, and more customer satisfaction. Better service quality means more smiley customer, more smiley customer gets new customer and more sales. All the effort for increase the service quality, increase the sales and show the chain stores more trusthworthy to shop. All test results and questionnaire prove them and the project has been successfully accomplished.

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Appendix 1: List of Abbreviation

A&P: Atlantic & Pacific Tea Company

AMA: American Marketing Association

BHS: The British Home Store

CEO: Chief Executive Officer

CPRF: Collaborative Planning, Forecasting and Replenishment

CRM: Customer Relation Management

e.g.: Example Given

ECR: Efficient Consumer Response

EDI: Electronic Data Interchange

EOQC: European Organization for Quality Control

Et al.: And other

HR: Human Resources

i.e.: In Essence

JIT: Just in Time

KPI: Key Performance Indicators

KSI: Key Success Indicators

LFL: Legends Football League

LNG: Liquid Natural Gas

P.p: Per Procurationem

Phd: Doctor of Philosophy

SCM: Supply Chain Management

Sig.: Significant

Std.: Standard

TEPAV: Türkiye Ekonomi Politikaları Araştırma Vakfı

TQM: Total Quality Management

TÜSİAD: Türk Sanayicileri ve İşadamları Derneği

VMI: Vendor Managed Inventory

Vol: Volume

Appendix 2

Table 2.1

Vegetable sales before and after the changes

Store	Mean vegetable sales before changes in 4 months	Mean vegetable sales after changes in 4 months	Vegetables sale before changes month 1	Vegetables sale before changes month 2	Vegetables sale before changes month 3	Vegetables sale before changes month 4	Vegetables sale after changes month 1	Vegetables sale after changes month 2	Vegetables sale after changes month 3	Vegetables sale after changes month 4
S1	7.125	12.041	6.559	6.487	7.029	8.424	12.508	13.193	12.129	10.336
S2	2.794	5.369	2.956	2.832	2.520	2.870	5.890	6.219	4.815	4.551
S3	16.402	20.314	16.516	14.138	16.012	18.945	22.143	22.094	20.439	16.581
S4	5.176	6.707	4.818	5.222	4.725	5.937	6.421	8.798	6.487	5.121
S5	3.458	7.009	3.521	3.021	3.158	4.131	7.679	8.030	7.154	5.173
S6	2.382	4.625	2.624	2.248	2.083	2.574	5.005	5.125	4.957	3.412
S7	13.621	13.105	12.234	12.624	13.137	16.488	15.471	13.862	12.691	10.394
S8	6.279	15.013	5.425	5.655	5.664	8.370	16.882	17.037	14.704	11.431
S9	3.054	5.142	2.943	3.161	2.749	3.363	5.285	5.784	5.733	3.765
S10	2.640	6.148	2.639	2.347	2.386	3.186	5.568	6.736	6.766	5.524
S11	6.633	11.945	5.971	5.505	6.564	8.491	11.764	15.384	12.903	7.728
S12	15.831	23.155	14.837	15.622	16.126	16.738	24.412	26.530	22.613	19.064
S13	7.422	8.070	7.668	6.430	6.778	8.812	8.902	8.914	8.138	6.327
S14	4.095	10.854	3.030	3.955	4.251	5.144	11.896	12.214	10.667	8.639
S15	4.830	6.694	4.936	4.435	4.887	5.062	6.528	7.401	7.175	5.671
S16	6.729	9.252	4.702	5.027	6.123	11.065	10.927	11.678	8.680	5.721
S17	6.056	10.898	6.022	5.625	5.123	7.452	12.071	11.175	11.523	8.823
S18	3.333	13.936	2.936	3.013	3.309	4.075	14.026	15.219	13.988	12.510
S19	10.594	17.019	11.488	10.302	9.823	10.762	16.559	19.507	15.600	16.412
S20	1.820	2.766	2.185	1.868	1.584	1.642	2.574	2.807	3.588	2.095
S21	14.775	30.990	10.700	10.376	15.013	23.012	29.623	33.506	32.306	28.525
S22	4.436	7.440	4.273	4.185	4.116	5.168	6.637	9.055	8.682	5.389
S23	2.861	4.844	1.880	3.079	3.091	3.393	5.084	5.377	5.353	3.562
S24	5.120	9.863	5.057	4.130	4.627	6.667	13.183	11.763	8.563	5.943
S25	11.207	13.822	11.214	10.120	10.832	12.663	14.952	15.646	13.199	11.493
S26	7.967	10.627	8.186	7.859	7.829	7.994	12.427	11.475	9.767	8.837
S27	2.288	6.858	2.223	1.989	2.110	2.827	7.083	9.384	7.017	3.947
S28	3.691	6.613	3.321	3.321	3.386	4.738	5.509	8.034	7.419	5.492
S29	5.539	7.470	5.161	4.693	5.802	6.501	7.813	8.403	7.577	6.088

Table 2.2

Fruit sales before and after the changes

Store	Mean fruit sales before changes in 4 months	Mean fruit sales after changes in 4 months	Fruits sale before changes month 1	Fruits sale before changes month 2	Fruits sale before changes month 3	Fruits sale before changes month 4	Fruits sale after changes month 1	Fruits sale after changes month 2	Fruits sale after changes month 3	Fruits sale after changes month 4
S1	7.330	9.310	7.086	7.357	6.767	8.109	8.593	9.047	9.032	10.568
S2	3.522	5.962	4.540	4.505	2.647	2.397	6.763	6.010	4.954	6.121
S3	15.065	13.257	16.127	16.941	13.285	13.906	15.836	14.250	11.860	11.080
S4	5.702	6.895	5.492	5.579	4.409	7.328	7.027	7.168	6.834	6.553
S5	4.826	7.702	5.513	5.211	3.996	4.584	7.967	7.829	7.171	7.841
S6	2.913	4.749	3.107	2.754	2.152	3.637	5.260	4.203	4.148	5.383
S7	17.972	9.507	16.156	20.135	18.839	16.756	9.744	7.565	9.175	11.545
S8	6.652	13.971	6.117	7.835	5.305	7.351	13.678	13.665	13.562	14.980
S9	3.905	5.348	3.787	3.813	3.360	4.660	6.286	5.056	4.650	5.400
S10	2.755	6.905	2.821	2.534	2.228	3.437	6.749	6.374	6.155	8.341
S11	9.373	8.319	9.541	8.515	8.901	10.534	9.736	8.984	7.752	6.807
S12	12.010	21.922	11.363	13.139	11.387	12.152	17.554	19.786	24.502	25.844
S13	8.543	7.064	9.354	8.800	6.851	9.170	7.802	7.686	5.731	7.037
S14	3.927	11.369	2.467	3.787	3.941	5.514	10.170	10.246	11.384	13.675
S15	5.231	6.082	5.931	5.121	4.847	5.024	6.723	5.808	5.197	6.598
S16	5.920	8.423	4.509	5.063	5.345	8.764	9.787	8.722	6.736	8.448
S17	8.018	11.563	8.459	9.063	6.713	7.838	11.312	9.495	11.592	13.852
S18	3.160	11.308	2.790	2.695	3.125	4.028	9.738	10.292	11.177	14.027
S19	10.419	13.116	10.181	10.160	8.902	12.432	13.418	14.962	11.322	12.763
S20	2.354	3.776	2.931	2.541	1.695	2.251	3.508	4.252	3.501	3.842
S21	14.323	29.694	10.556	9.821	15.370	21.544	24.287	27.399	28.953	38.136
S22	4.017	8.256	3.868	4.247	2.850	5.101	8.300	9.061	8.928	6.734
S23	3.032	5.235	3.110	3.385	2.148	3.485	5.595	5.893	4.417	5.034
S24	6.002	9.188	6.394	5.493	4.602	7.520	11.043	8.664	8.030	9.014
S25	10.831	12.876	11.933	11.162	8.790	11.441	14.251	13.655	10.829	12.771
S26	8.556	10.563	9.844	9.419	8.303	6.660	9.112	10.766	9.881	12.492
S27	2.940	6.131	2.513	3.096	2.885	3.267	5.635	8.395	6.157	4.338
S28	4.573	6.884	3.884	4.109	3.912	6.386	6.841	5.708	6.869	8.117
S29	5.707	6.861	6.549	6.159	4.887	5.233	7.251	6.787	6.170	7.236

Appendix 3

Table 3.1

Bakery product sales before and after the changes

Store	Mean bakery products sales before changes in 4 months	Mean bakery produts sales after changes in 4 months	Bakery sales before changes month 1	Bakery sales before changes month 2	Bakery sales before changes month 3	Bakery sales before changes month 4	Bakery sales After changes month 1	Bakery sales After changes month 2	Bakery sales After changes month 3	Bakery sales After changes month 4
S1	3.509	5.065	3.048	3.258	3.409	4.320	4.763	5.393	5.070	5.033
S2	2.708	3.556	2.322	2.478	2.670	3.362	3.670	3.724	3.412	3.418
S3	4.382	6.227	3.771	4.121	4.280	5.357	5.983	6.472	6.507	5.945
S4	6.202	7.577	5.485	6.178	5.975	7.170	7.253	7.931	7.720	7.404
S5	3.034	4.347	2.772	2.959	2.988	3.419	4.238	4.679	4.111	4.360
S6	4.036	4.533	3.797	4.080	4.120	4.146	3.668	4.632	4.873	4.960
S7	10.080	12.059	8.988	9.819	9.451	12.064	12.240	13.198	11.847	10.951
S8	7.073	10.018	6.083	6.533	6.789	8.885	9.533	10.848	10.154	9.538
S9	2.486	2.673	2.555	2.181	2.402	2.804	2.772	2.836	2.716	2.369
S10	4.222	7.466	3.580	3.701	4.370	5.237	7.052	8.315	7.453	7.043
S11	5.047	7.186	5.283	4.366	4.504	6.034	7.008	7.842	7.267	6.626
S12	6.206	8.238	5.881	6.109	6.085	6.751	8.308	8.293	8.186	8.166
S13	3.654	4.541	3.178	3.078	3.475	4.886	4.378	4.802	4.572	4.412
S14	6.832	7.567	4.878	6.250	7.356	8.844	6.882	8.123	7.369	7.895
S15	4.954	6.955	4.395	4.762	4.730	5.930	6.539	7.119	7.493	6.669
S16	4.906	6.148	4.318	4.722	5.038	5.546	5.500	6.782	6.289	6.020
S17	5.379	5.309	4.579	5.019	5.187	6.731	5.733	5.637	5.245	4.619
S18	3.063	7.265	2.434	2.796	3.142	3.881	6.373	7.932	7.188	7.567
S19	3.029	6.442	2.661	2.780	3.101	3.574	5.552	6.459	6.379	7.376
S20	2.235	3.769	1.978	2.032	2.037	2.894	3.882	3.759	3.534	3.902
S21	8.248	11.395	6.898	7.862	8.500	9.733	10.800	12.574	11.191	11.013
S22	5.055	6.505	4.676	4.782	4.858	5.905	5.770	7.015	6.519	6.716
S23	4.642	5.575	4.256	4.795	4.647	4.871	4.705	6.486	5.678	5.433
S24	7.481	9.676	6.809	6.720	7.051	9.345	9.481	10.586	9.445	9.192
S25	12.081	15.671	11.102	11.040	11.754	14.428	14.970	16.443	15.769	15.502
S26	5.370	6.588	5.325	5.510	5.065	5.580	6.131	6.580	7.056	6.583
S27	3.199	5.979	2.566	3.200	2.921	4.111	5.102	6.952	5.913	5.950
S28	5.147	7.439	4.670	4.761	5.018	6.141	6.508	8.036	7.760	7.453
S29	3.849	6.673	3.061	3.933	3.858	4.546	6.165	7.305	7.026	6.196

Appendix 4

Table 4.1

Display quantity affect product 1

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S12	103	345,00	137	120	70	86	256	258	393	473
S24	104	170,25	88	117	90	119	136	194	191	160
S25	160	157,75	114	161	189	174	157	158	161	155
S22	26	142,00	10	0	40	53	102	102	240	124
S11	127	140,75	100	126	126	156	139	159	148	117
S8	79	124,50	48	96	78	94	129	148	125	96
S17	67	123,75	47	93	80	48	91	99	154	151
S26	110	121,00	131	157	99	52	87	64	176	157
S16	74	119,75	72	83	56	84	84	129	121	145
S19	55	119,50	31	34	69	84	118	107	130	123
S9	41	116,00	19	33	61	49	106	91	132	135
S23	51	108,25	27	40	52	85	82	135	111	105
S5	75	101,50	38	85	77	98	102	108	83	113
S21	55	99,75	39	38	52	91	103	110	104	82
S10	50	98,50	47	45	48	59	77	82	130	105
S29	38	92,50	34	28	39	50	57	99	111	103
S28	38	91,50	33	33	50	37	81	86	106	93
S3	71	85,00	53	61	70	99	69	96	93	82
S13	31	84,00	24	33	20	48	67	61	97	111
S6	69	82,75	61	71	60	82	64	98	91	78
S2	36	75,75	31	39	37	35	78	72	61	92
S18	24	71,50	23	21	21	30	58	88	67	73
S7	35	69,75	12	34	41	51	76	78	76	49
S4	27	62,00	16	24	27	40	67	70	56	55
S15	30	59,00	15	35	27	44	50	64	58	64
S20	36	57,50	24	47	38	36	62	64	48	56
S14	39	57,25	22	40	50	43	52	63	53	61
S1	27	51,00	23	15	34	37	60	70	35	39
S27	32	42,50	19	38	34	35	31	48	44	47

Table 4.2

Display quantity affect product 2

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S12	118	106	123	129	106	113	70	98	119	137
S3	85	101	94	88	77	79	106	99	106	93
S21	57	95	70	60	45	52	83	104	105	88
S25	105	92	100	113	113	95	118	82	87	82
S8	69	79	78	86	45	66	76	82	81	78
S7	52	71	65	55	45	41	65	60	95	63
S5	55	67	67	62	44	47	66	61	72	67
S24	42	61	56	46	32	35	48	60	75	59
S2	54	64	62	53	48	54	72	62	70	52
S14	48	54	66	51	37	36	41	55	65	55
S10	49	54	68	53	43	33	57	52	59	49
S18	41	44	59	45	22	36	19	43	58	54
S17	55	40	72	57	52	37	25	55	37	44
S4	36	46	49	31	37	28	38	53	51	41
S11	39	46	43	50	38	24	33	55	48	46
S19	41	35	66	37	22	39	20	23	49	48
S15	33	43	34	30	39	28	36	65	33	38
S27	36	40	47	37	31	28	39	31	42	48
S22	41	42	45	50	32	37	48	32	46	40
S23	32	36	44	27	26	31	28	37	46	34
S29	43	31	37	36	46	51	18	20	38	47
S13	34	32	37	36	40	22	28	37	32	31
S16	24	31	30	19	23	22	18	30	42	35
S28	32	32	33	36	33	27	34	28	32	33
S1	26	30	40	21	26	18	33	23	28	34
S26	25	31	24	21	21	34	32	25	32	34
S20	19	28	16	21	14	24	21	37	31	21
S6	22	15	22	24	20	23	11	11	17	19
S9	19	18	12	18	26	20	13	20	23	14

Table 4.3

Display quantity affect product 3

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S12	3	10	5	1	4	3	7	10	14	9
S21	1	8	1	1	0	3	17	4	6	5
S19	2	7	1	3	2	0	4	12	5	6
S9	6	6	5	4	8	6	5	4	10	6
S23	4	6	1	2	6	5	4	6	8	5
S25	4	6	0	6	6	4	6	6	6	4
S16	3	5	4	4	1	4	4	5	8	4
S11	5	5	2	5	4	9	5	8	1	6
S5	3	5	5	1	2	5	4	3	4	7
S28	2	5	1	2	3	1	3	6	7	2
S29	2	4	0	0	3	4	6	2	5	4
S10	2	4	1	0	3	2	4	5	5	2
S4	2	4	1	2	1	5	3	6	6	0
S6	2	4	1	3	3	2	5	2	4	3
S8	0	4				0	3	4	3	4
S20	2	4	1	2	4	1	3	4	3	4
S18	1	3	0	0	1	2	6	3	0	4
S1	2	3	2	1	2	2	1	2	5	4
S3	0	3	0	0	0	1	2	6	2	2
S14	1	3	1	1	1	2	6	2	1	2
S27	1	3	0	2	0	0	0	2	7	2
S13	0	2	1	0	0	0	2	2	0	5
S15	1	2	0	1	3	1	3	4	2	0
S24	1	2	1	0	0	2	3	1	2	2
S17	1	2	0	1	3	0	2	3	0	2
S26	0	2	0	0	0	1	0	0	2	5
S7	1	2	1	0	0	1	0	0	5	1
S22	1	1	1	2	2	0	1	0	2	1
S2	0	1	0	0	1	0	0	3	0	0

Table 4.4

Display quantity affect product 4

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S12	287	290,00	439	297	264	149	290	305	338	227
S8	202	190,00	199	173	238	199	209	182	198	171
S4	133	168,25	124	124	150	133	184	191	149	149
S1	146	164,00	145	147	177	115	125	133	193	205
S10	203	159,50	194	251	216	149	177	124	168	169
S3	197	149,50	209	210	193	177	157	177	143	121
S18	119	141,00	141	92	136	108	166	151	122	125
S2	125	137,50	124	152	189	35	137	144	141	128
S19	111	136,25	145	102	125	72	114	120	153	158
S7	99	135,75	143	107	71	74	152	135	150	106
S5	193	132,00	205	180	203	182	135	113	144	136
S15	144	131,50	139	157	140	138	110	130	147	139
S13	114	130,75	124	152	147	31	120	137	142	124
S6	176	123,00	190	203	169	141	134	155	95	108
S16	102	118,50	99	89	116	102	126	117	129	102
S14	104	101,00	78	86	148	104	102	98	114	90
S17	86	98,25	115	98	102	27	96	102	95	100
S9	77	75,75	77	90	96	43	78	77	82	66
S11	102	62,00	129	117	111	52	66	67	65	50
S20	58	80,00	70	63	67	31	74	87	87	72
S21	244	228,25	300	235	314	128	216	268	219	210
S22	235	186,25	227	201	236	277	187	201	164	193
S23	195	191,00	273	266	214	25	189	151	230	194
S24	115	143,00	169	164	88	37	136	172	137	127
S25	246	232,00	263	257	313	152	209	243	247	229
S26	228	152,25	245	263	244	161	105	145	181	178
S27	83	126,25	78	74	98	82	98	141	132	134
S28	132	105,25	151	152	141	82	88	96	143	94
S29	156	147,00	163	148	206	108	123	142	152	171

Table 4.5

Display quantity affect product 5

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S12	26	54,25	33	31	16	25	47	47	76	47
S19	12	40,25	5	8	22	13	30	34	36	61
S8	20	35,50	7	15	35	22	38	39	44	21
S3	17	35,00	15	16	14	23	36	36	27	41
S5	18	29,50	17	19	16	18	39	28	18	33
S16	14	29,00	10	12	14	21	31	27	31	27
S11	19	25,00	19	12	18	28	23	21	39	17
S17	17	24,50	14	12	18	25	33	24	19	22
S10	16	24,25	18	7	23	15	28	25	25	19
S6	13	23,50	16	6	17	11	26	30	15	23
S13	8	23,25	6	8	10	9	15	25	20	33
S15	11	21,00	12	9	13	11	14	19	22	29
S9	16	19,00	25	7	8	23	21	12	26	17
S14	6	18,00	6	3	8	6	15	18	19	20
S2	6	17,75	2	2	5	13	17	20	18	16
S4	10	17,50	20	7	6	8	20	17	17	16
S18	9	16,50	0	6	12	17	21	17	15	13
S1	6	12,50	4	11	3	6	11	13	12	14
S7	16	11,50	11	18	14	22	15	9	10	12
S20	10	12,75	10	13	6	11	13	12	14	12
S21	26	28,75	22	21	33	29	28	28	24	35
S22	13	20,50	7	12	19	13	17	22	23	20
S23	18	35,00	12	16	18	26	29	47	33	31
S24	17	33,25	16	10	17	25	40	42	24	27
S25	24	45,50	19	27	26	25	51	49	39	43
S26	14	17,50	12	14	12	17	21	19	20	10
S27	10	14,25	10	7	11	12	22	8	8	19
S28	9	9,25	11	7	6	12	11	4	7	15
S29	18	34,25	13	13	19	25	22	47	37	31

Table 4.6

Display quantity affect product 6

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S19	64	107	56	64	79	56	109	91	106	122
S12	98	106	110	125	95	63	102	103	104	116
S11	72	88	77	78	68	63	78	92	102	78
S15	73	76	70	92	81	50	74	66	80	84
S17	58	64	64	67	54	47	54	72	68	63
S16	42	58	40	38	52	39	43	59	56	72
S13	50	51	42	61	62	36	49	51	54	48
S8	47	47	48	53	31	55	39	61	57	29
S18	49	44	55	54	53	32	52	37	45	42
S7	39	44	41	45	44	25	36	48	56	35
S3	46	42	51	34	63	35	52	46	35	36
S5	39	38	43	32	52	28	38	47	31	37
S1	43	37	47	47	48	28	33	30	42	42
S2	30	35	33	22	48	18	36	35	27	41
S9	37	32	57	29	34	27	25	41	35	26
S10	22	30	23	16	23	24	24	30	33	34
S14	24	28	36	27	16	15	20	23	35	34
S6	33	27	52	37	15	28	33	23	24	27
S4	16	21	21	12	17	14	8	27	20	30
S20	34	39	38	31	35	31	39	34	31	50
S21	65	74	73	66	66	55	64	74	78	79
S22	50	86	57	56	37	49	57	116	83	88
S23	60	66	67	74	58	39	65	57	84	56
S24	65	61	59	83	65	52	51	62	73	59
S25	75	99	92	73	84	50	89	103	101	102
S26	37	39	60	41	27	19	36	43	49	26
S27	8	23	20	10	1	1	21	21	19	31
S28	51	49	47	49	60	46	44	67	56	28
S29	79	77	69	98	75	73	87	85	74	62

Table 4.7

Display quantity affect product 7

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S12	139	235	76	122	178	178	259	244	226	212
S11	116	203	71	78	153	163	195	226	216	176
S16	100	197	60	100	102	136	182	224	196	184
S19	74	186	49	68	80	99	184	211	154	193
S8	114	171	87	107	139	122	177	164	148	195
S17	99	168	33	98	124	140	151	212	173	137
S10	97	165	61	97	99	131	155	161	185	157
S3	99	143	64	96	116	118	142	143	151	135
S9	204	141	49	152	314	302	173	133	133	126
S15	108	137	52	103	138	140	153	153	108	135
S1	82	131	60	60	102	106	196	114	110	104
S18	74	126	24	64	78	130	132	167	96	107
S13	85	122	42	67	110	119	89	153	103	144
S2	85	121	35	69	102	132	152	113	128	90
S6	79	110	32	76	106	100	116	111	112	101
S5	99	102	48	97	102	147	98	83	110	115
S14	57	92	43	49	65	72	90	104	87	87
S7	66	76	21	68	89	86	67	94	91	51
S4	56	74	33	82	55	54	83	77	75	61
S20	69	119	17	43	82	134	110	121	121	123
S21	128	214	106	118	128	161	230	241	204	181
S22	90	160	62	82	94	122	158	159	194	127
S23	170	185	91	167	193	230	147	165	194	232
S24	117	213	59	89	148	173	201	230	219	201
S25	126	202	63	102	144	196	199	209	214	185
S26	66	70	45	55	62	101	80	67	64	68
S27	27	81	15	29	30	35	65	99	78	82
S28	87	146	39	58	108	142	140	178	156	111
S29	69	114	21	54	93	109	104	112	107	134

Table 4.8

Display quantity affect product 8

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S8	202	234	151	269	210	178	239	255	224	217
S3	92	223	88	93	117	70	207	225	187	273
S17	176	193	140	217	186	161	145	235	156	236
S12	104	180	158	147	82	28	178	175	184	182
S15	155	159	113	132	165	210	147	160	129	199
S2	115	152	61	125	132	140	93	128	153	235
S18	83	149	95	81	80	75	182	107	135	170
S14	74	138	79	109	61	47	198	96	140	119
S1	113	125	99	149	120	84	116	101	132	150
S5	139	117	146	136	126	149	103	107	96	161
S4	150	106	148	215	148	87	67	108	92	156
S13	37	99	24	6	67	50	88	89	77	142
S7	151	96	148	171	132	153	78	70	80	155
S19	82	93	71	47	131	80	111	7	114	141
S10	110	92	99	183	92	64	91	115	83	79
S9	43	83	50	45	44	32	73	90	105	63
S11	51	72	49	64	31	58	49	41	80	119
S6	60	65	23	90	71	57	77	79	52	50
S16	54	55	31	52	82	52	29	39	73	77
S20	64	55	54	54	84	63	50	54	49	67
S21	184	284	103	292	174	166	284	243	310	299
S22	193	171	192	265	161	154	172	169	166	178
S23	73	121	49	114	71	56	113	163	88	118
S24	73	120	67	43	112	70	114	71	65	230
S25	146	204	107	171	194	112	163	196	219	238
S26	102	127	47	173	123	63	87	113	104	203
S27	88	157	93	120	74	64	154	237	146	90
S28	45	100	39	23	71	45	71	83	117	129
S29	136	111	114	153	184	91	86	102	105	149

Table 4.9

Display quantity affect product 9

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S3	847	1122,50	870	743	843	931	1.325	1.206	956	1.003
S11	1.102	1076,75	847	925	1.227	1.408	1.084	1.110	1.103	1.010
S8	766	1014,75	804	695	679	884	1.039	1.142	971	907
S17	815	989,50	648	787	860	964	1.115	1.098	911	834
S12	605	966,50	661	373	580	804	1.045	1.051	860	910
S19	662	839,75	413	642	684	907	824	896	782	857
S16	710	766,75	659	707	686	786	833	897	678	659
S18	460	756,25	444	486	476	434	699	748	710	868
S13	581	700,75	529	600	539	655	767	698	676	662
S15	666	687,75	608	635	648	771	680	656	704	711
S14	466	661,75	326	411	519	608	671	766	631	579
S1	411	633,25	405	385	366	489	576	621	599	737
S10	373	596,00	299	335	387	469	620	624	581	559
S9	798	579,75	749	643	866	934	670	578	579	492
S2	470	576,50	360	426	595	500	551	639	633	483
S5	524	544,25	490	480	556	571	578	584	545	470
S6	435	517,25	304	448	474	514	558	518	470	523
S7	411	513,25	292	366	399	585	546	514	541	452
S4	344	425,25	217	390	322	445	446	420	427	408
S20	566	603,50	472	486	589	717	658	567	563	626
S21	794	1190,50	699	793	733	950	1.246	1.257	1.248	1.011
S22	870	1090,00	656	855	875	1.093	1.066	1.272	1.078	944
S23	802	915,75	723	739	799	948	756	1.007	946	954
S24	1.129	1251,00	1.040	1.062	1.219	1.195	1.310	1.600	1.143	951
S25	1.333	1669,25	1.184	1.260	1.256	1.631	1.676	1.778	1.609	1.614
S26	487	490,50	507	477	453	511	452	561	486	463
S27	371	450,00	283	337	432	430	448	503	459	390
S28	847	878,25	707	832	930	918	900	949	856	808
S29	547	573,00	502	458	546	680	513	663	557	559

Table 4.10

Display quantity affect product 10

Store	Before changes mean 4 month sales	After changes mean 4 month sales	Before changes month 1	Before changes month 2	Before changes month 3	Before changes month 4	After changes month 1	After changes month 2	After changes month 3	After changes month 4
S19	12	20	15	14	10	8	23	13	17	27
S11	10	18	11	6	8	16	16	12	15	29
S3	7	13	7	11	4	6	10	14	14	14
S16	8	12	9	5	8	9	10	11	13	13
S12	8	11	6	14	8	5	9	11	11	14
S15	5	10	1	9	8	1	11	9	9	11
S7	6	10	4	7	7	6	10	15	10	3
S13	4	9	3	6	4	4	15	9	7	6
S5	9	9	6	9	12	8	12	10	9	5
S18	3	9	3	4	1	2	6	9	11	9
S6	10	8	12	10	17	2	1	13	15	4
S8	4	8	3	4	4	3	10	10	8	3
S9	16	7	19	24	14	7	7	9	10	2
S2	8	7	4	10	11	5	4	7	8	7
S1	4	7	0	8	4	2	6	6	9	5
S10	5	6	4	3	7	7	7	1	5	9
S14	5	5	6	11	1	1	9	4	3	3
S4	3	5	4	3	0	3	8	3	6	1
S17	5	4	5	6	4	5	7	4	3	3
S20	7	5	3	10	8	5	3	6	5	6
S21	7	11	9	6	4	7	14	10	11	8
S22	17	10	15	11	21	19	18	6	10	5
S23	3	14	0	0	1	9	20	9	20	8
S24	7	8	6	7	9	7	7	8	7	9
S25	16	16	16	17	15	15	21	15	16	12
S26	7	8	6	6	7	10	9	6	2	14
S27	5	4	5	8	4	3	5	5	0	5
S28	7	6	5	7	5	10	7	4	4	10
S29	4	7	4	7	0	3	10	8	6	3

Appendix 5

Table 5.1

Earlier brand sales product 1

Store	Brand	Sales before change the brand	Before month 1	Before month 2	Before month 3	Before month 4	Before month 5	Before month 6
S23	Earlier brand	17	23	18	9	18	12	21
S14	Earlier brand	11	12	7	4	12	10	21
S2	Earlier brand	10	13	8	8	7	10	14
S6	Earlier brand	9	6	12	6	10	5	12
S3	Earlier brand	21	26	22	19	15	23	18
S27	Earlier brand	10	13	16	3	8	9	9
S24	Earlier brand	16	10	23	7	18	21	18
S25	Earlier brand	23	31	19	14	16	33	25
S5	Earlier brand	10	16	13	3	1	9	16
S22	Earlier brand	15	15	9	7	13	28	20
S7	Earlier brand	21	15	33	11	11	21	34
S19	Earlier brand	20	24	18	14	20	16	27
S28	Earlier brand	15	11	12	10	16	12	28
S9	Earlier brand	16	14	15	10	20	14	20
S16	Earlier brand	16	13	20	3	15	17	25
S11	Earlier brand	26	30	27	12	27	23	38
S20	Earlier brand	9	8	8	3	7	13	14
S29	Earlier brand	8	4	5	3	7	10	19
S13	Earlier brand	15	10	9	7	16	25	23
S17	Earlier brand	14	11	15	4	12	15	25
S15	Earlier brand	17	15	17	12	23	19	18
S1	Earlier brand	6	7	9	2	6	5	7
S10	Earlier brand	10	8	7	5	6	14	22
S21	Earlier brand	24	21	16	21	28	25	35
S18	Earlier brand	12	8	9	7	12	11	26
S4	Earlier brand	9	12	4	4	8	6	21
S26	Earlier brand	13	17	11	10	3	10	28
S8	Earlier brand	11	2	3	3	22	11	25
S12	Earlier brand	17	12	11	8	16	20	34

Table 5.2

New brand sales product 1

Store	Brand	Sales after change the brand	After month 1	After month 2	After month 3	After month 4	After month 5	After month 6
S23	New brand	22	47	20	32	11	9	10
S14	New brand	14	21	9	22	13	11	9
S2	New brand	18	24	28	20	12	20	6
S6	New brand	13	13	18	10	18	12	9
S3	New brand	40	77	54	44	19	30	17
S27	New brand	11	22	18	10	7	7	4
S24	New brand	43	84	49	53	20	41	9
S25	New brand	44	75	54	48	37	33	17
S5	New brand	22	34	38	18	20	19	4
S22	New brand	29	54	28	34	29	19	10
S7	New brand	35	52	59	41	13	31	15
S19	New brand	29	53	36	41	21	15	5
S28	New brand	18	23	24	25	18	13	7
S9	New brand	20	23	24	16	23	13	20
S16	New brand	24	48	18	36	22	15	7
S11	New brand	34	46	48	37	16	24	31
S20	New brand	19	33	28	21	15	9	6
S29	New brand	16	25	19	25	10	12	7
S13	New brand	22	41	25	32	10	14	7
S17	New brand	26	27	39	43	18	17	10
S15	New brand	24	34	31	26	14	24	12
S1	New brand	11	23	17	11	7	5	4
S10	New brand	23	35	34	28	11	14	14
S21	New brand	41	63	45	50	38	31	17
S18	New brand	20	16	42	26	10	17	8
S4	New brand	17	33	19	19	20	11	2
S26	New brand	19	35	30	23	12	10	5
S8	New brand	26	38	54	22	20	14	7
S12	New brand	38	38	71	47	22	23	24

Table 5.3

Earlier brand sales product 2

Store	Brand	Sales before change the brand	Before month 1	Before month 2	Before month 3	Before month 4	Before month 5	Before month 6
S23	Earlier brand	18	23	20	9	13	13	32
S14	Earlier brand	19	12	27	15	17	14	29
S2	Earlier brand	16	14	13	17	13	14	22
S6	Earlier brand	18	9	25	16	13	18	27
S3	Earlier brand	30	22	45	23	19	33	36
S27	Earlier brand	13	19	14	10	11	8	17
S24	Earlier brand	21	15	20	8	19	20	45
S25	Earlier brand	37	35	34	31	40	36	48
S5	Earlier brand	19	24	13	12	13	14	36
S22	Earlier brand	12	13	11	4	17	10	17
S7	Earlier brand	20	16	28	6	10	17	45
S19	Earlier brand	17	17	31	15	13	12	15
S28	Earlier brand	19	20	26	17	16	11	24
S9	Earlier brand	11	11	14	10	6	4	23
S16	Earlier brand	18	16	19	13	11	23	28
S11	Earlier brand	26	31	25	26	25	14	34
S20	Earlier brand	11	12	15	9	4	11	12
S29	Earlier brand	11	15	12	4	7	10	19
S13	Earlier brand	15	20	17	8	16	10	20
S17	Earlier brand	14	12	13	9	14	11	22
S15	Earlier brand	13	6	7	11	16	17	18
S1	Earlier brand	6	4	5	2	8	6	11
S10	Earlier brand	17	18	16	8	10	18	32
S21	Earlier brand	31	40	42	18	25	12	46
S18	Earlier brand	12	17	10	7	9	10	16
S4	Earlier brand	13	15	14	11	14	9	15
S26	Earlier brand	13	11	19	9	10	6	24
S8	Earlier brand	21	20	23		11	19	34
S12	Earlier brand	23	34	23	22	12	21	25

Table 5.4

New brand sales product 2

Store	Brand	Sales after change the brand	After month 1	After month 2	After month 3	After month 4
S23	New Brand	22	13	22	26	28
S14	New Brand	24	25	25	26	18
S2	New Brand	20	19	22	19	19
S6	New Brand	16	17	12	10	23
S3	New Brand	38	36	41	37	39
S27	New Brand	30	34	36	20	30
S24	New Brand	36	29	35	40	38
S25	New Brand	43	29	47	51	45
S5	New Brand	21	18	25	22	18
S22	New Brand	25	25	20	24	31
S7	New Brand	24	19	27	33	16
S19	New Brand	25	12	37	33	16
S28	New Brand	17	8	13	29	16
S9	New Brand	14	15	10	17	15
S16	New Brand	14	0	3	23	29
S11	New Brand	34	27	38	40	32
S20	New Brand	9	7	6	11	10
S29	New Brand	28	23	34	24	29
S13	New Brand	14	4	19	15	19
S17	New Brand	25	18	24	20	36
S15	New Brand	19	10	17	24	25
S1	New Brand	23	18	26	24	22
S10	New Brand	35	48	24	30	36
S21	New Brand	50	50	56	59	34
S18	New Brand	32	35	28	43	23
S4	New Brand	11	7	11	20	5
S26	New Brand	20	26	27	12	13
S8	New Brand	28		12	35	38
S12	New Brand	39	45	36	42	32

Table 5.5

Earlier brand sales product 3

Store	Brand	Sales before change the brand	Before month 1	Before month 2	Before month 3	Before month 4	Before month 5	Before month 6
S23	Earlier Brand	33	25	26	22	51	36	35
S14	Earlier Brand	18	17	25	21	17	13	14
S2	Earlier Brand	59	48	60	61	62	64	56
S6	Earlier Brand	18	5	18	18	25	27	15
S3	Earlier Brand	41	31	41	35	34	52	52
S27	Earlier Brand	14	16	13	14	8	14	21
S24	Earlier Brand	42	35	36	39	51	34	54
S25	Earlier Brand	76	65	71	61	100	80	79
S5	Earlier Brand	20	19	20	22	18	25	14
S22	Earlier Brand	20	18	13	26	17	22	25
S7	Earlier Brand	17	13	14	21	16	25	10
S19	Earlier Brand	110	134	87	107	124	113	93
S28	Earlier Brand	32	7	14	24	50	41	53
S9	Earlier Brand	55	25	23	50	120	67	45
S16	Earlier Brand	62	70	60	57	58	66	58
S11	Earlier Brand	60	28	20	50	73	86	101
S20	Earlier Brand	13	8	8	5	7	19	31
S29	Earlier Brand	17	5	10	14	26	21	26
S13	Earlier Brand	16	9	11	8	30	12	26
S17	Earlier Brand	42	16	37	42	44	45	68
S15	Earlier Brand	23	8	21	23	17	37	34
S1	Earlier Brand	18	16	21	15	17	20	20
S10	Earlier Brand	67	48	71	86	77	74	43
S21	Earlier Brand	62	40	66	58	71	52	85
S18	Earlier Brand	15	7	24	16	12	17	14
S4	Earlier Brand	34	30	47	45	38	38	8
S26	Earlier Brand	18	7	22	21	21	20	18
S8	Earlier Brand	28	26	28	32	27	33	21
S12	Earlier Brand	111	141	150	88	86	127	76

Table 5.6

New brand sales product 3

Store	Brand	Sales after change the brand	After month 1	After month 2	After month 3	After month 4	After month 5	After month 6
S23	New Brand	23	33	37	12	1	23	30
S14	New Brand	15	22	18	11	10	15	13
S2	New Brand	67	123	85	33	46	60	56
S6	New Brand	21	46	19	12	10	17	22
S3	New Brand	64	80	70	56	62	51	64
S27	New Brand	12	30	9	9	3	12	6
S24	New Brand	98	122	122	85	76	90	93
S25	New Brand	114	158	152	102	74	103	93
S5	New Brand	25	18	32	23	13	29	33
S22	New Brand	40	40	32	60	44	49	13
S7	New Brand	31	63	40	14	11	23	37
S19	New Brand	156	248	197	116	127	84	163
S28	New Brand	70	101	76	57	42	75	69
S9	New Brand	102	100	125	83	76	108	119
S16	New Brand	77	95	83	70	48	65	100
S11	New Brand	119	134	134	106	83	111	144
S20	New Brand	49	41	72	42	38	57	46
S29	New Brand	31	55	25	24	18	38	28
S13	New Brand	58	63	61	53	29	56	88
S17	New Brand	61	77	85	50	47	50	56
S15	New Brand	65	78	46	59	69	72	68
S1	New Brand	18	33	31	10	8	12	12
S10	New Brand	18	28	8	9	16	15	29
S21	New Brand	47	61	55	31	49	48	35
S18	New Brand	18	37	32	12	11	4	13
S4	New Brand	27	40	11	14	37	29	32
S26	New Brand	20	30	20	20	15	16	21
S8	New Brand	30	46	38	11	22	27	33
S12	New Brand	156	208	157	121	127	167	154

Table 5.7

Earlier brand sales product 4

Store	Brand	Sales before change the brand	Before month 1	Before month 2	Before month 3	Before month 4	Before month 5	Before month 6
S23	Earlier Brand	65	90	76	52	50	59	64
S14	Earlier Brand	74	88	96	51	50	78	80
S2	Earlier Brand	70	100	79	51	55	66	70
S6	Earlier Brand	29	21	37	13	30	30	40
S3	Earlier Brand	112	96	107	93	102	117	154
S27	Earlier Brand	41	58	39	44	38	23	44
S24	Earlier Brand	81	90	80	58	52	88	116
S25	Earlier Brand	106	104	102	96	112	96	125
S5	Earlier Brand	56	71	74	35	28	57	72
S22	Earlier Brand	49	54	69	43	45	46	37
S7	Earlier Brand	79	87	103	58	59	80	86
S19	Earlier Brand	87	106	91	54	74	98	96
S28	Earlier Brand	47	44	51	21	45	54	66
S9	Earlier Brand	59	40	68	54	44	71	79
S16	Earlier Brand	36	49	37	21	26	34	49
S11	Earlier Brand	97	75	109	83	79	88	145
S20	Earlier Brand	47	36	57	45	51	30	63
S29	Earlier Brand	37	22	36	37	35	35	56
S13	Earlier Brand	50	27	43	43	41	43	102
S17	Earlier Brand	64	72	75	40	76	56	66
S15	Earlier Brand	53	45	56	42	41	62	73
S1	Earlier Brand	39	40	42	32	28	31	62
S10	Earlier Brand	62	61	66	60	60	53	73
S21	Earlier Brand	121	124	113	96	113	120	157
S18	Earlier Brand	43	39	29	50	35	47	60
S4	Earlier Brand	54	52	36	43	60	62	72
S26	Earlier Brand	48	49	37	39	54	58	50
S8	Earlier Brand	83	94	81	63	75	93	90
S12	Earlier Brand	137	164	144	106	115	158	132

Table 5.8

New brand sales product 4

Store	Brand	Sales after change the brand	After month 1	After month 2	After month 3	After month 4	After month 5	After month 6
S23	New brand	106	55	95	144	131	103	108
S14	New brand	98	70	101	110	111	117	78
S2	New brand	105	57	145	108	97	117	108
S6	New brand	60	34	63	76	53	58	75
S3	New brand	170	150	175	179	165	197	155
S27	New brand	75	63	63	91	76	69	88
S24	New brand	165	141	174	171	173	160	170
S25	New brand	161	145	143	182	162	151	181
S5	New brand	86	115	65	104	77	100	56
S22	New brand	95	77	90	103	101	99	102
S7	New brand	110	92	122	124	102	108	110
S19	New brand	125	99	136	131	137	127	121
S28	New brand	89	41	76	79	95	130	111
S9	New brand	98	57	83	72	105	104	164
S16	New brand	99	68	92	120	120	111	85
S11	New brand	141	122	171	155	137	138	122
S20	New brand	59	55	74	50	53	69	54
S29	New brand	86	72	68	90	90	104	93
S13	New brand	72	40	84	79	76	76	78
S17	New brand	99	87	91	106	108	98	102
S15	New brand	80	44	84	90	77	92	94
S1	New brand	85	92	89	106	69	93	61
S10	New brand	124	130	132	142	104	133	100
S21	New brand	214	183	198	242	225	216	221
S18	New brand	102	58	126	144	95	96	90
S4	New brand	81	88	95	79	80	103	43
S26	New brand	80	32	80	100	96	105	69
S8	New brand	141	108	157	128	171	159	124
S12	New brand	203	142	221	246	190	222	199

Table 5.9

Earlier brand sales product 5

Store	Brand	Sales before change the brand	Before month 1	Before month 2	Before month 3	Before month 4	Before month 5	Before month 6
S23	Earlier brand	37	64	9				
S14	Earlier brand	15	36	23	11	7	6	6
S2	Earlier brand	14	26	28	10	4	0	
S6	Earlier brand	12	35	5	5	2	13	11
S3	Earlier brand	22	38	24	19	22	20	11
S27	Earlier brand	4	10	3	6	1	0	1
S24	Earlier brand	15	46	18	11	3	4	5
S25	Earlier brand	19	49	22	15	4	11	10
S5	Earlier brand	11	26	16	19	7	0	0
S22	Earlier brand	12	44	4	0	0		
S7	Earlier brand	12	25	12	17	5	2	12
S19	Earlier brand	18	29	38	13	8	4	
S28	Earlier brand	13	44	10	4	6	4	10
S9	Earlier brand	25	80	33	22	8	1	8
S16	Earlier brand	12	35	0	0			
S11	Earlier brand	28	95	27	25	2	8	12
S20	Earlier brand	8	21	10	8	7	3	0
S29	Earlier brand	9	27	14	1	2	0	9
S13	Earlier brand	14	22	11	30	3	7	13
S17	Earlier brand	14	36	11	6	9	8	
S15	Earlier brand	15	33	26	4	6	10	10
S1	Earlier brand	13	23	7	14	8		
S10	Earlier brand	26	33	19				
S21	Earlier brand	25	68	5	1			
S18	Earlier brand	9	26	14	5	2	7	0
S4	Earlier brand	15	29	0				
S26	Earlier brand	17	30	16	9	14		
S8	Earlier brand	29	58	0				
S12	Earlier brand	19	37	35	2	0		

Table 5.10

New brand sales product 5

Store	Brand	Sales after change the brand	After month 1	After month 2	After month 3	After month 4	After month 5	After month 6
S23	New brand	205	119	198	229	224	276	181
S14	New brand	121	68	122	138	148	126	124
S2	New brand	132	125	162	143	147	108	108
S6	New brand	110	116	94	117	117	116	97
S3	New brand	183	203	202	190	176	193	133
S27	New brand	68	43	71	90	78	69	54
S24	New brand	244	183	218	254	232	278	296
S25	New brand	246	294	248	261	212	258	203
S5	New brand	123	107	130	132	118	157	92
S22	New brand	195	166	157	226	222	217	184
S7	New brand	91	86	87	101	106	104	63
S19	New brand	203	124	227	222	215	256	176
S28	New brand	135	83	100	133	158	178	160
S9	New brand	189	151	212	147	231	164	227
S16	New brand	207	202	235	231	192	210	173
S11	New brand	258	229	292	301	305	220	198
S20	New brand	114	103	124	140	118	109	92
S29	New brand	137	114	119	150	166	170	100
S13	New brand	102	85	117	116	100	121	75
S17	New brand	184	128	183	215	233	162	185
S15	New brand	134	128	149	138	115	131	143
S1	New brand	132	118	109	173	137	140	114
S10	New brand	154	149	173	161	160	127	154
S21	New brand	201	194	254	229	180	188	160
S18	New brand	102	50	130	125	116	101	87
S4	New brand	102	112	114	123	109	90	65
S26	New brand	59	72	77	44	68	62	33
S8	New brand	183	202	178	203	198	181	135
S12	New brand	235	215	274	265	240	207	206

Appendix 6

Table 6.1

Number of Customer

Store	Before changes mean number of customer	After changes mean number of customer	Before changes Month1	Before changes Month2	Before changes Month3	After changes Month1	After changes Month2	After changes Month3
S1	13869	15180	13859	13822	13925	16035	14386	15120
S2	13544	14227	14087	13140	13405	14900	13819	13962
S3	17425	16737	17832	17181	17263	17758	16193	16260
S4	14135	14325	13184	14834	14388	15077	13786	14113
S5	13814	13614	13870	13491	14082	14654	13240	12949
S6	9333	9361	8694	9688	9616	9997	9299	8786
S7	16270	15603	16530	16702	15578	16490	15368	14951
S8	18989	20296	19050	19030	18886	21876	19957	19055
S9	8395	8269	7748	8612	8825	8835	8074	7898
S10	13953	16022	14109	13657	14094	16741	15295	16029
S11	17810	16951	17886	17371	18174	18946	16356	15551
S12	29526	31871	29982	28927	29670	33826	31438	30348
S13	13685	13348	13243	14271	13540	14049	13092	12903
S14	12340	12914	12006	12838	12176	14128	12682	11931
S15	13926	14208	14199	13727	13852	14814	13994	13817
S16	12407	13355	11820	13072	12328	14648	13062	12355
S17	13625	15012	13731	13662	13483	15600	14683	14752
S18	11650	14299	11688	11511	11751	17020	14719	11159
S19	17451	18447	17955	17381	17018	19846	17862	17634
S20	9254	9565	9414	8989	9359	10074	9393	9229
S21	21378	22900	21687	21053	21395	24852	21216	22633
S22	17244	17023	16819	17733	17179	17619	15937	17513
S23	17105	18326	16863	17317	17136	20160	16669	18149
S24	18591	19310	18087	18655	19031	21211	18192	18526
S25	19691	19820	19763	19533	19778	20889	18898	19672
S26	12949	13693	12686	12978	13183	14112	12747	14221
S27	9356	10955	9397	9052	9619	12902	9896	10066
S28	19676	18366	20227	19123	19677	21599	16980	16518
S29	13627	14226	13883	13154	13844	15209	13100	14370

Appendix 7

Table 7.1

General sales before changes

Store	Mean sales before changes	Sales before changes m2	Sales before changes m3	Sales before changes m4	Sales before changes m5	Sales before changes m6	Sales before changes m7	Sales before changes m8	Sales before changes m9	Sales before changes m10	Sales before changes m11	Sales before changes m12
S1	127334	114503	128908	126206	137053	133665	122534	121213	124893	130829	133503	132840
S2	129284	123191	136016	129786	135624	126014	115909	122060	132475	134196	136792	148401
S3	218937	204482	223357	220978	230075	229010	208843	205993	211507	225853	222719	240877
S4	127582	129620	139175	130189	133220	115364	109807	125595	122025	134920	127133	117505
S5	137442	131986	146042	136381	140718	136147	131015	127084	133168	147784	150573	152036
S6	119617	109807	118963	121474	128131	127154	117360	118588	120668	113985	111514	101142
S7	204153	214347	226534	214284	219127	198559	174447	181075	179305	199470	184452	199725
S8	178996	176465	193860	185720	184132	170105	156155	163588	171674	195650	192000	199083
S9	111256	84813	113865	107856	111120	118150	114696	111353	124973	127299	129020	114416
S10	122565	115409	122281	120879	126327	124217	115478	116037	122813	135581	136539	143993
S11	183125	173497	208023	186551	183003	186222	169062	161855	181655	198482	214271	211167
S12	259556	253440	277175	258301	265781	250487	249669	261221	259816	260923	255918	268389
S13	146600	139766	143919	137344	143009	150318	141186	137948	152368	168871	150866	148648
S14	129878	145960	152733	130530	126450	121870	106499	112970	125165	132271	126151	124215
S15	148781	143477	155900	141833	147671	146629	144659	145006	155800	152567	151891	164607
S16	133333	96153	138125	132061	141013	132727	131334	137313	139788	151486	145563	144002
S17	167875	168669	183502	174772	170080	168761	149704	151432	157954	172334	168010	177915
S18	107160	108942	118359	111936	114256	101391	83639	91433	100089	118050	117280	120718
S19	182998	171094	205909	193544	195198	187992	163763	169473	176934	185759	185920	199921
S20	98752	94715	104156	96672	98095	95510	94308	92127	97867	104457	107481	112663
S21	241188	246930	261153	247699	249692	233180	206560	213621	231123	265013	273147	286757
S22	203877	196396	229095	219453	216350	204712	184968	186711	188001	201118	194043	201622
S23	162243	152193	170839	162058	160877	158707	148994	169070	158519	167560	163500	166643
S24	191010	183153	205714	192508	195654	192840	181219	170492	186455	205627	198953	195918
S25	271946	245588	279787	273112	286905	287132	260033	263500	274814	288215	289334	305415
S26	166278	161052	171451	161351	185600	176946	163688	164258	153382	156358	153570	159269
S27	105387	109287	118977	110633	108646	100764	88012	94158	98205	107520	108071	106428
S28	161103	146215	180346	169219	175484	160532	140187	143300	151771	177017	177308	179996
S29	130462	125572	127000	120927	127827	122283	133030	126858	133979	147704	152039	161284

Table 7.2

General sales after changes

Store	Mean sales after changes	Sales after changes m1	Sales after changes m2	Sales after changes m3	Sales after changes m4	Sales after changes m5	Sales after changes m6	Sales after changes m7	Sales after changes m8	Sales after changes m9	Sales after changes m10	Sales after changes m11
S1	147354	141045	146548	162494	158597	161643	143945	134244	140804	132245	151971	95023
S2	157551	150207	153604	162729	152716	160789	158847	145636	155030	156861	179090	112663
S3	234069	229900	231074	246680	234196	231215	235042	225005	227552	224227	255802	146638
S4	144203	130487	137615	149522	147128	147152	138001	140000	144288	144186	163648	101762
S5	148687	147633	152352	161840	152740	154277	143908	130650	139558	139654	164258	94306
S6	134983	102241	119687	128770	136154	138450	150153	139111	143494	144959	146809	89653
S7	175228	192255	195415	199523	191350	184588	165906	140423	143779	160309	178728	110670
S8	223765	204297	229826	248916	231002	232521	222643	194665	210449	216831	246504	143434
S9	123063	100654	108374	115592	133939	122669	138865	126016	134084	126909	123526	91440
S10	168219	165023	165192	177155	173048	172407	171891	155983	158740	163292	179462	113525
S11	194526	179396	188964	205183	207416	199639	192120	175367	169348	208665	219162	131846
S12	318518	263716	304249	327133	319024	320672	304884	319517	347143	324107	354737	216804
S13	162219	147982	159154	167401	159300	160264	166477	150736	161947	167355	181579	113147
S14	150216	119819	156565	177051	167596	170582	167396	131435	129053	128425	154236	93016
S15	171701	161958	166433	175480	171042	167570	175581	161989	169748	170607	196602	116553
S16	159188	144196	161474	185259	162068	164618	167213	146573	147990	145889	166604	98837
S17	203828	190544	196000	212114	205842	201571	201039	192062	199710	209334	230062	133122
S18	181442	102950	182657	205247	192674	201202	192094	173517	179684	182727	201666	103963
S19	215606	201049	204293	225799	218132	230771	214251	216077	222724	223210	199759	123357
S20	124761	110064	115602	125379	113065	118835	121808	124464	137989	134498	145905	83528
S21	312996	304612	297657	344400	321180	335485	334418	278990	301186	278419	333611	205445
S22	215716	206724	195098	225670	221834	221013	223391	208911	223985	209592	220941	131957
S23	190156	171111	170913	207176	208756	197399	191707	179628	180659	187524	206690	128383
S24	208852	216670	215920	237868	222407	218473	205385	173430	196215	185997	216156	126286
S25	313264	315017	296421	317636	311194	310035	332859	304033	305079	305474	334893	206246
S26	179082	168937	162717	176398	177039	180412	185696	175435	172730	181654	209799	132263
S27	132517	112299	125803	163401	144433	143453	134178	111620	120315	125086	144579	86061
S28	175954	153952	156999	186992	195320	190676	180417	156868	164358	175442	198517	124801
S29	177198	160388	150590	174298	168943	174820	176654	183167	191304	196984	194832	126224

Appendix 8

Table 8.1

Details of the questionnaire

	How long have you been to this store?							
	First time	**Last 1 week**	**1 month**	**2 - 3 month**	**3-4 month**	**4-6 month**	**Last 7 months**	
Female	53	68	106	80	126	145	318	How many
Male	66	44	80	61	91	95	191	person?
	First time	**Last 1 week**	**1 month**	**2 - 3 month**	**3-4 month**	**4-6 month**	**Last 7 months**	
Female	6%	8%	12%	9%	14%	16%	35%	
Male	11%	7%	13%	10%	14%	15%	30%	The percentage
Total	8%	7%	12%	9%	14%	16%	33%	

	Did you notice any changes in this market?		How many points do you give to this new design of this market out of 5?					
	Yes	**No**	**1**	**2**	**3**	**4**	**5**	
Female	672	220	41	49	108	294	345	How many
Male	423	197	30	46	68	209	224	person?
	Yes	**No**	**1**	**2**	**3**	**4**	**5**	
Female	75%	25%	5%	6%	13%	35%	41%	
Male	68%	32%	5%	8%	12%	36%	39%	The percentage
Total	72%	28%	5%	7%	12%	36%	40%	

Table 8.2

Empty questionnaire form

Bu mağazaya ne kadar zamandır geliyorsunuz?	İlk defa	
	Son 1 haftadır	
	1 aydır	
	2-3 ay	
	3-4 ay	
	4-6 ay	
	Son 7 aydır	
Bu markette herhangi bir değişiklik farkettiniz mi?	Evet	
	Hayır	
Bu marketin bu yeni haline 5 üzerinden bir not verseniz, kaç puan verirdiniz?	1	
	2	
	3	
	4	
	5	