

Mugla Journal of Science and Technology

AN INVESTIGATION ABOUT COMPETITIVE ADVANTAGE IN TERMS OF DIFFERENTITATION IN PRODUCT DESIGN FOR FURNITURE INDUSTRY: ANKARA SAMPLE

Mehmet ALTINÖZ 1*, Kıvanç YILMAZ 2, Bulut AKKUŞ 3, İlker USTA 3

¹Vocational School of Social Sciences, Hacettepe University, 06100, Ankara, Turkey maltinoz@hacettepe.edu.tr
²Faculty of Technology, Gazi University, 06500, Ankara, Turkey kivancyilmaz@gazi.edu.tr
³School of Vocational Technology, Hacettepe University, 06532, Ankara, Turkey bulut.akkus@hacettepe.edu.tr, iusta@hacettepe.edu.tr

Received: 08.11.2016, Accepted: 06.12.2016

*Corresponding author

Abstract

In today's business environment, existence of enterprises depends on prediction about the extent of environmental change and development on competitive edge techniques that provide them advantages. In this context, consumer demand and production of new designs to meet their needs and to be available at affordable prices according to market stands out.

Design is a view of the product or product parts. The new design concept in production; thinking, planning, design and implementation comes up as a result of the decision-making processes with a more accurate representation of the uncertain status of state transformation. This condition can lead to differentiation of people's consumption habits and technological developments changing rapidly contribute to the production process.

The purpose of the study is to contribute to the debate process and to examine competitive advantage in terms of differentiation in product design for the furniture industry. For this purpose, a study was conducted on furniture enterprises operating in Ankara and the role of the variation in product design has been uncovered in terms of product performance, market share and competitive advantage.

According to the findings of the research resulting reached important conclusions about competitive advantages of furniture enterprises operating in Ankara that differentiate them based on variations in product designs and recommendations within the framework of what needs to be done. In addition, the location of modern production and consumption habits of the design for the furniture enterprises as a competitive tool has demonstrated significant results within the scope of how to use.

The research is regarded important to emphasize that the issue of the competitive differentiation in terms of product design in the furniture industry. The research is expected to practice in these areas and will contribute to future studies.

Keywords: Competition, Competitive Edge, Product, Design, Furniture Industry

REKABET ÜSTÜNLÜĞÜ BAKIMINDAN ÜRÜN TASARIMINDAKİ FARKLILAŞMANIN MOBİLYA ENDÜSTRİSİ AÇISINDAN İNCELENMESİ: ANKARA İLİ ÖRNEĞİ

Özet

İşletmelerin günümüz iş ortamında ayakta kalabilmeleri; çevresel değişimleri olabildiği ölçüde öngörebilmesine ve kendilerine rekabetçi üstünlükler sağlayacak teknikler geliştirmelerine bağlı bulunmaktadır. Bu kapsamda tüketici istek ve ihtiyaçlarını karşılayacak yeni tasarımların üretilmesi ve pazara uygun fiyatlarla sunulması konusu öne çıkmaktadır.

Tasarım, ürün ya da ürün parçasının bir görünümü olup, üretimde yeni bir tasarım anlayışı ise; düşünme, planlama, karar verme ve uygulama süreçleri sonucunda tasarımın, belirsiz bir durumdan daha kesin bir duruma dönüşümünün temsil edilmesiyle ortaya çıkmaktadır. Bu durum, insanların tüketim alışkanlıklarının farklılaşmasına ve hızlı bir biçimde değişen teknolojik gelişmeler, üretim süreçlerine katkıda bulunmaktadır.

Çalışmanın amacı; söz konusu tartışma sürecine katkı sağlamak, rekabet üstünlüğü bakımından ürün tasarımındaki farklılaşmayı mobilya endüstrisi açısından incelemektir. Bu amaçla, Ankara'da faaliyet gösteren mobilya işletmeleri üzerinde bir çalışma yapılmış ve ürün tasarımındaki farklılaşmanın; ürün performansı, pazar payı ve rekabet üstünlüğü açısından rolü ortaya çıkarılmaya çalışılmıştır.

Araştırmanın sonucunda ortaya çıkan bulgulara dayanılarak; Ankara'da faaliyet gösteren mobilya işletmelerinin rekabet üstünlüklerinin, ürün tasarımlarındaki farklılaşmalarına dayalı olduğu konusunda önemli sonuçlara ulaşılmış ve neler yapılması gerektiği çerçevesinde öneriler getirilmeye çalışılmıştır. Ayrıca, tasarımın modern üretim ve tüketim modellerindeki yeri, mobilya işletmelerinin rekabet aracı olarak tasarımı nasıl kullanacakları kapsamında önemli sonuçlar ortaya koymuştur.

Araştırma, ürün tasarımındaki farklılaşmanın mobilya endüstrisi açısından rekabet üstünlüğü sağlayacağı konusuna vurgu yapması bakımından önemli görülmektedir. Araştırmanın söz konusu alandaki uygulamalara ve yapılacak araştırmalara katkı sağlayacağı beklenmektedir.

Anahtar Kelimeler: Rekabet, Rekabet Üstünlüğü, Ürün, Tasarım, Mobilya Endüstrisi

1 Introduction

Businesses that helps in achieving the objectives such as planning and use of all the resources we can express the action plan of the strategy, including regulation in the medium and long run. From this definition, businesses, at the right time to

move the business competitors to respond with the right action to insert the correct attitude to variations in market conditions, constantly to ensure proper detection of consumer needs and expectations must develop new ways and methods characterized by repetitive process.

In a globalized world, businesses that want to keep their assets and maintain competitive advantage in the hands of the world, tend to take out the competitive development of existing products or new products to the market impact. These trends bring along their differentiation in design. Copying shortening of product life cycles and ease with globalization is forcing businesses to differentiation in product development and design. By the agency of advances in communication technology, consumers about the characteristics of the products they want to easily access worldwide (cost, aesthetics, such as ergonomics) information become eligible. Increasing customer awareness, as changes in the needs and wishes of the show itself and cause manufacturers to go to differ in design. And thanks to production resources and capabilities are enriched with technological advances achieved in the past are to be delivered to consumers of products in production is not possible quality.

2 Conceptual Framework

2.1 The Concept of Competition

In a particular area / entities operating in different markets, they undertook the struggle to achieve the same success goals of the company or institution can be expressed as competition. The Competitiveness defines a state defined and measured against an opponent. Market level and the firm level competition takes place between the companies want to increase their market share and profits in the same. Competitiveness of the companies evaluated by their performance on the market. In other words, the company is highly competitive and successful company that is successful is higher competitiveness. Businesses that are highly competitive replaces lacked the competitiveness of enterprises, creating more value. In this case, the output of the macro scale, it showed an increase in economic recovery and prosperity. Technological infrastructure, qualifications workforce has, that vary depending on the management team experience and approach next to the microstructure of the active business strategies and relations with other competitors, the quality of inputs used, the presence of support industries with demand, which is effective in the marketplace creates external factors that determine the competitiveness of enterprises.

Businesses in market conditions should lead to success in a variety of activities to be successful. These are the highlights:

- Determination of consumer needs and desires effectively, continuously monitoring the variability,
- Compared to competitive high-quality, secure and develop durable products,
- Sales and distribution effort be directed at the right target at the right time,
- Accurate determination of the price sensitivity of consumers and purchasing behavior,
- The effectiveness of marketing and sales activities,
- The pursuit of trademark and patent work can be listed.

2.2 Competitive Edge

According to Porter [1], competitive, compared to competitors in the market as a whole of the most profitable and actions that contribute to the performance of the company in an effort to achieve superior position in the market and the supply of differences beyond the reach of the competition means to provide a competitive advantage. The concept of competitive advantage is developed on the basis of creative differences. This difference may vary according to the characteristics of the services offered. Competition in the industry in general is determined by five fundamental elements and directed:

The company will enter a new threat to the sector,

- · The bargaining power of buyers,
- The bargaining power of suppliers,
- · Competition among existing firms,
- Products and services, threats to take his place.

Hamel and Prahalad [2], the concept of competition to define the future of the long-term and accept the activities to be undertaken for future opportunities. According to De Bono a company can manage to create a degree of built-in value can establish superiority over the competition [3]. Factors that direct competition is shown in Table 1. [4]:

Table 1. Factors Governing Competition.

Fac	Factors Governing Competition						
Price Factor	Product Factor	Management Factor Delivery Time					
Sale Price	Quality/Reliability						
Campaigns	Aesthetic	Quality After-Sales Service					
Pay Variety	Usefulness	Distribution and Service Network					
Operating	Ease of	Spare Parts					
Expenses	Maintenance	Warranty					
Service Costs	Ergonomic	Advertisement					
Depreciation	Portability	Consumer-Friendly Products					

To gain an advantage against competitors in the industry, there are three basic competitive strategies applied in general. These; cost leadership, differentiation (design and brand creation, technological differences, customer service, sales methods) and focusing. Differentiation, more effort and financial resources to want to research, development and design work makes it mandatory. Often the cost factor and the technology used in direct proportion to the quality of the raw materials to be used in the second plan costs can increased considerably. Differentiation in some sectors with high market shares may not be effective, but provides a strong and defensible position the firm. However, it ensures that owned the high-tech or the recent use of luxurious materials are not considered entering the business machines like professional performance expectations in the sector is the highest level of differentiation high market share [5].

2.3 Design

Design is derivated of designare, which is set both show, specify and draw in Latin. In English it has retained its sense of design. Words, a plan depending on the medium used, project, process or a sketch, model, motive, means visual composition [6]. Hence design; to meet the demands of the audience, and meet the needs of all the plans made to resolve the existing problems, the drawing can be expressed as a whole, modeling and visualization action.

2.3.1 Design Processes

As explained by Ürük [7] has two distinctive features, including creator and manager of the design process.

As the Creative Process Design

There must be a problem that we need to be defined for the realization of the creation and decoding of the design process. Designers, after the problem is defined, follow a logical process to be applied at all stages of the project. Design producer groups, whether to develop a design department in itself, would choose to work outside another group wants the process is the same. Accordingly, there are three main stages to the creative process [7]:

 Getting information phase: An opportunity or a potential need and this need is defined as an assessment of the design concept of convertibility is a stage based on probability.

- Creating ideas and concepts phases: At this stage in which the conclusions from the information obtained, after detecting the problem in its entirety designer with sketches of the different possible forms can take the project to reveal the design uses all the creative source. These drawings reveal the design of the axes and the different product forms, graphic signs that could help explore models and design options. The resulting solutions, customers also finish with the most desired by selecting a group that includes. Selective presentation made to the group, which is responsible for the manufacturing of different people allows you to get the reviews. These comments will help to improve the design solution.
- Realization phase: The idea was to make the content produced and supplied designer at this stage, implementation projects and materials to be used, reveals the product or sign a plan that identifies colors and surfaces for the different elements. This stage (such as manufacturers and suppliers outside the company) is considered time-consuming because it requires the cooperation of different departments and by testing three different directions by management:
 - Technical Control; use, compatibility testing, safety and durability criteria,
 - Planning Test; preparing production programs, calculation,
 - In Terms of Marketing Evaluation; brand value of the design solution, in compliance with the target audience and market share target.

Design as a Process Manager

The design process starts with defining the problem to be solved and ends with a product or service as a result of the evaluation made by the company integrates design and management decision-making. Therefore the creative process extends beyond the production and the drawing of-model [7].

The design process as an administrator; creation, production, management, market planning has been achieved within the scope of a design, which combined, is an information process that has been converted and uncovered [7].

2.4 Product Development

As announced by Filiz [8] product development is a process aimed at a more appropriate presentation of a product to market products to existing ones as compared customer needs. Accordingly, product development; market and customer begins by evaluating the feedback on the existing product manufacturer. This information revealed negative findings in the use of their products and customer complaints or suggestions can be positive to ensure improvement in the quality and use.

Improve products; to differentiate the products, as renew and even a means to convert another product to product physically can develop products make it different from the existing appearance and function, reduce the cost and raise the quality is also meant to improve the product. Therefore, the product development process; technology strategy, project management, business development, economic analysis, innovation, dissemination of innovation, participative management team also includes issues such as work [8].

2.4.1 New Product Concept

The new product has been described as commercial property market not previously been available, this recipe does not reflect today's understanding fully the new product. For this, there may be mentioned the following four types described new [8]:

Real new product: It is produced in order to stimulate demand remained secret in the market until now. Require large expenditures of R & D (research and development) need to operate, as well as a demanding and risky business.

New for businesses, no new products to market: There is a product on the market, it is put on the market under a new brand name. Such goods are usually out on the market as a result of technological innovation. A manufacturer is the result of technological innovation to offer a product to market, other manufacturers are also had to develop similar products.

A commodity which is produced in other countries, adapted to be presented to the market: Foreign goods, local / regional markets served by fitting the needs of the market.

By changing the manufacturer's products that the market has to offer: The physical properties of the product (design, color, size, packaging, etc.) or to the market with small changes to the content is presented as new. Manufacturers, instead of producing new products prefer this way.

2.4.2 Product Life Cycle

The products are the life cycle that can be addressed in terms of economic and business. This life cycle, production is important in terms of sales and sales potential. Products are born, grow, and then enter a period of stagnation and decline begins. Product sales have fallen on a large scale and this is a sign that completes the parallel significantly increase the cost of the life of the product. Moving to decline during product differentiation will allow the product to live a little longer, but it does not last forever. Product life-cycle downturn on the planning of new products with differentiated products that enter the process of time will inevitably also be achieved. No other solution than products that have completed the renovation will not be successful because of the life cycle [8].

2.5 New Product Design

As described by Şahin [9], new product design; In the production of new physical presence will be launched to determine what materials will be used, to determine its size and quality values, it is working to create the appearance of identification and achievement standards. Well thought out, mainly in business a successful design process provides the following benefits:

- Customer requests and requirements with the desire of goods / services balances the properties.
- Shorten the design time of new goods and services.
- The adjustments necessary to make a viable design minimizes.

According to Yalçın [10], successful new product designs while providing the benefits of the business, they can bring the greatest risk of failure and losses for businesses. As all of the designs might not be produced as a product, the design may be given up at any stage of producing or some designs decided to be produced may fail in the market. Therefore, the new product design decisions include the strategic decisions of the company.

2.5.1 Strategic and Tactical Decisions of Business

By providing long-term customer satisfaction and profitability in order to stay alive in the competitive market of strategic business choices, and customer-oriented products that satisfy the customer is required to make toward launching soon. The satisfaction of customers, with acceptable price, we can provide products offering superior quality and functionality of the products of competitors. By adopting this aspect of innovation as a business strategy, technology pioneer in the market or new product designs to become the leader plays an important role in obtaining a competitive advantage. New product design leader in business trends / fashions to determine the future of the market and to have a voice, it is difficult to plan the future of this day. It can only perform continuous renewal and new product design [10].

2.5.2 Technological Developments

Advances in technology; products and increasing information sharing speed related services to consumers to increase customer awareness by facilitating transportation and global competition is also increasing higher quality, more flexible and more effective manner, permits an increase in production based on automation. It also provides the ability to report on various management levels of processing more data in less time [11].

In parallel with the rapid spread of innovations to the development of technology has led to the diversification of consumer demand. Efforts to use this change as a competitive tool in business leads to reflection on the technological development of new products. On the other hand, developments in technology businesses to change their production methods, new products can also allow them to produce different methods and techniques. The development of technology reasons is concerned, the company is becoming challenging to design new products [10].

2.5.3 Changes in Consumer Demand

In response to the standards and restrictions imposed by collective living individuals they are trying to invent the peculiar life. This effort will bring change to the agenda. The change leads to the concept of fashion as a result of managing the commercial concerns. Fashion, increases the demand for change and determine the direction of change. Money exchange businesses to the demands of consumers concern with meeting the demands made are forced to design new products, and this leads to a continuous change by creating a mutual interaction [10].

Consumers become more conscious with the improvement of communication technology, economical product to buy, it seeks to have the quality and the latest innovations [11].

3 Review Terms of the Furniture Industry

Furniture, functions, uses, structure, purpose, style, according to the material and surface treatment [12]:

- Interior or exterior furniture.
- Furniture for individual or collective use (urban furniture, industrial furniture),
- Modern furniture,
- English, Italian, Scandinavian furniture,
- Functional furniture,
- Classic or modern furniture,
- Disassembled or assembled furniture,
- Fixed or movable furniture,
- Kitchen, living room, bedroom furniture, office furniture,
- Wood, panels, mats and so on. It can be classified as furniture.

World trade of furniture is defined according to the basic classification, like all other products. Furniture, the Standard International Trade Classification (SITC) are classified according to the following manner [13]:

- **821.1**: Living-off furniture, and parts thereof.
- 821.2: Bedding items and so on.
- **821.3**: Metal furniture (not classified elsewhere).
- 821.5: Wood furniture (not classified elsewhere).
- **821.7**: Other items of furniture (not classified elsewhere).
- **821.8**: Parts of the furniture in the group 821.3, 821.5 and 821.7.
- **821.8**: Medical, surgical, dental and veterinary medicine used in furniture, and parts thereof.

NACE, another coding system (General Standard of Economic Activities in the European Community) is an abbreviation indicating the economic activity classification name for a variety of statistics, developed since 1970 in the European Union. NACE, according to economic activities (such as production, employment, national accounts) and other areas where statistical areas and spread over a wide area provide a framework for the compilation and presentation of statistical data. According to established codes 31 top code for furniture "Furniture Manufacturing", including the sub-codes 31.01; 32.02; with 31.03 and 31.09 "Office and store furniture", "Kitchen Furniture", "B Production", "Home & Garden Furniture" shape [14].

3.1 World Furniture Industry

Manufacture of furniture, has an important place in the manufacturing industry continued its development and growth over the years. Home and industrial production value of the manufacturing world including the furniture industry in 2004 as \$ 284 billion, while \$ 350 billion in 2008, has reached. Production value with the effects of the global crisis in 2010 341 billion to \$ has declined to re-enter after a rapid upward trend and stood at \$ 446 billion in 2013 [15]. Rapid change and transformation process in Turkey in the sector which, for the year 2023 is \$ 25 billion and \$ 10 billion with export production expectations in the world top 10 in Europe and aims to be among the top 5 largest furniture manufacturers [13].

China from manufacturers in the world furniture industry, according to the US in the furniture production value in 2011, Italy have carried out more than half of the world's furniture production with Germany [16]. China, using production cost advantages in recent years by increasing the production capacity and production volume in order to meet the increasing domestic demand in 2013 has become a stand-alone takes one quarter of the world production is the country that the most exported with \$ 60.1 billion. US, the second largest manufacturer, is the world furniture imports in the first place, with \$42.1 billion. European countries, particularly in furniture design, production and trade, the impact of competitive quality and brand elements have higher industry. Of these countries, Italy and Germany, in particular expertise, stands out with its quality and brands. Developing countries, in Poland, Brazil and Vietnam formed the production capacity and production volumes in the furniture manufacturing industry are among the major producing countries. World consumption in the furniture industry's largest market in terms of volume of \$88.4 billion (20.3%) and is US \$ 75.8 billion (17.4%) and China is the second largest market [15].

3.2 Furniture Industry in Turkey

Today, the Turkish furniture industry, most employees by traditional methods workshop-type, has a view dominated by small firms. However, especially in the last 15-20 years in small-sized companies as well as mid-sized and large firms it is also a rise in the number. Along with this change in the overall

structure of Turkey in the furniture industry, changes in technology and methods of production can be observed.

The continuation of the craft tradition continues intensity of handmade furniture production by the presence of companies in the SME level, though the large-scale export increased with the entry into the cycle of the firm's capabilities and exporter Number of firms developing with each passing day the sector has been one of the industry presence in international competition. Although the infrastructure is based on many years in the industry technologically depending unable to make the original accumulation of weak domestic machinery industry, machinery and equipment supply leads to our formation from the Italian and German companies are dependent on foreign as weight and increases turnaround times, increasing investment costs. In addition, the accredited laboratory furniture-related services sector is almost nonexistent in Turkey. This issue only serves a limited size in a laboratory in Inegöl. Furniture companies imported their raw materials and exported their products to overseas, that are tested in accredited laboratories opened in areas where common of furniture production of such laboratories and qualified for foreign trade are needed to ensure the reporting capability [16]

Looking at the 2014 data, Turkey furniture industry, which ranks first investment partnership, and in second place in the first six months of 2014 after the automotive industry, the third sector the best performer compared to the same period last year. Therefore, the furniture industry, sales revenue in 2014 was transferred to the third sector conditions that increases the most. However, the furniture sector net profit growth is ranked 16th of 39 in the sector and is the second sector providing most of the equity increase profitability [17].

TÜİK (Turkey Statistical Institute) published, employment and number of establishments number of local units operating in the furniture industry by the year 2012, according to data from 33924, is seen as the number of paid employees 121080. SGK (Social Security Administration), according to the year 2012 the number of employment and workplace values registered office is 16915, 116860 people would seem as if the insured employees. The top five in terms of employment levels, respectively; Istanbul, Bursa, Izmir, Ankara and Izmir are. The number of people per company in the furniture manufacturing sector in the country, which is below the average 7.68 to 6.9 average [13].

The furniture sector in Turkey, according to the share of total production in Istanbul, Ankara, Bursa (Inegöl), Kayseri, Izmir and Adana is concentrated in the region [18]. Considering the concentration of the provinces in terms of the number of businesses in Kayseri, Ankara, Bursa, stood out cities such as Adana, respectively, the net sales figures taken into consideration in Istanbul, Kayseri, Bursa is located in the first row, Ankara and Izmir. Which performs close to 19% of the sector's turnover in Kayseri province share in the total turnover of the furniture sector is 22%. The manufacturing industry is the largest company in Kayseri, where 30% of employment in the sector is located in the furniture industry [19]. Export data by region are shown in Table 2. [17].

Table 2. Export Data by Region

Region	2013 Exports (\$)	2014 (First 10 Months) Exports (\$)
Istanbul	4.270.226.824	4.170.700.536
Izmir	119.563.373	132.542.096
Bursa, Eskisehir, Bilecik	520.960.182	468.157.929
Ankara	294.370.179	451.429.048
Kayseri, Sivas, Yozgat	372.457.158	312.324.208

Industrial design registration with trademark in furniture manufacturing industry; high value-added production, are important indicators for innovation and branding processes. TPE (Turkish Patent Institute), while 200 received in 2000. The number of trademark registration in the furniture manufacturing industry, according to the trademark in 2013, 2,663 units were taken. Likewise, the industrial design registration number 402 in 2000, increased to 1,719 in 2013 [15].

By TÜİK made in 2010, "income and living conditions" in terms of share of the expenses of the furniture according to research in household expenses, according to the rate of spending 20% of five-income rental-housing, food, transportation, fifth after the restaurant-hotel spending place It is located [13]. MOSDER (Turkey Association of Furniture Manufacturers) by a research company jointly carried out, and in a report prepared two years [20], in 2013 the average household income of branded furniture consumers while 2,153 Turkish Liras in 2015. 2528 has been determined that the Turkish Lira to go. 15 provinces, according to this study of 1031 people per refresh interval of furniture has been identified as 9 years in Turkey and the Black Sea region in particular has been shown to be less than that time.

The diversity of the population and demographic changes as well as personal and household furniture spending as a share of proportional with increases in revenues and requested furniture products began to increase. Living conditions, consumer habits, the changes in the needs and tastes are also important factors in the consumption side. Due to this change in the factors they considered in the choice of furniture consumers; durability, after-sales service, price, aesthetics and design differences / shortening of lead times stand out with originality. Why are pushing consumers to purchase the furniture, re-moving space changes, the establishment of new households, followed the fashion, and it is observed that the desire to benefit from the campaign. Healthy and comprehensive data on domestic furniture spending cannot be reached exactly, though in Table 3. Arranged to be double-digit after the decimal point, BKM (Interbank Card Center) conducted by the published credit card furnishings and expenditure data as an indicator for the domestic market size it is [15].

Table 3. Credit Card Expenditure by Year

Made by Year with Credit Card									
Furnit	Furniture and Decoration Spending (x106 Turkish Lira)								
2008	2008 2009 2010 2011 2012 2013 2014/9								
7.02	6.55	8.05	10.11	12.73	18.09	14.26			

The late effects of the economic crisis being experienced in Europe and the country has attracted the attention significant increases in export and import volumes. Therefore future years

growth is expected in the market of Turkish firms in the world market between to exist in the European market is more challenging than the competition and issues affecting the competitive advantage to be sustainable strengthening its presence need to be in a speedy recovery effort is on [14].

As one of the shortcomings of our country's furniture industry, the furniture export structures of most intense near the periphery countries and the Arabic countries from the furniture market share, far below the current production capacity can be said to occur. Serious value of furniture consumption in Russia, Austria, Saudi Arabia and at much lower levels, U.A.E. (United Arab Emirates) exports to countries such as mainly conducted. At weak markets, Turkish furniture companies should focus on improving the quality in every aspect of product to achieve larger shares of market and to make the market for themselves for exports by turning minority of production according to consumption (such as Britain, France, USA and Japan) to opportunity [14].

Environmental sensitivity in our country about the furniture industry and the Kyoto Protocol should live indoors in the health of the furniture and the movement spread to the control structure for the measurement of environmentally harmful volatile is beginner level. In this regard, Bursa, Inegol and TSE (Turkish Standards Institute) was established laboratories but are limited to the service [14].

3.3 Furniture Industry in Ankara

Universities, techno parks, industrial shade of strong industry clusters, senior bureaucracy, capital concentration of organizations and non-governmental international organizations in Ankara, owned by economic, social, stands the human and intellectual capital. In this sense, Ankara, 2009-2010, URAK (International Competitiveness Research Institute) conducted by the "Inter-Provincial Competitiveness Index" according to the study in Ankara, ranked second in Turkey; EDAM (Center for Economics and Foreign Policy Studies), dated March 2009 made by "a Competitiveness Index for Turkey," the research took place in the first place. In addition, "CNBC-e Business Magazine" made by the last four years, "Turkey's Livable City Survey" According to the results, Ankara Turkey's "Most Livable City" retains title. Both R & D and innovation as well as having a strong background in the IT field in Ankara, the country established to spread to the entire technology production and other sectors 39 is first due to host the techno park 6. However, the Ministry of Industry and Trade meets the criteria of 64 private R & D center is 14 in Ankara, the second in Turkey in this field [18].

Manufacture of furniture in the sectoral distribution of business ranks second in Ankara by 10,65% share. Siteler, particularly in Akyurt and concentrated in Yenimahalle sector consists of mostly family-owned firms in Siteler [21]. For the determination of the inter-provincial competitiveness index for the furniture industry; province of "Human Capital and Quality of Life", "Branding Skills and Innovation", "Trade Skills and Production Potential" and "Accessibility" in terms that are weighted equally four sub-indexes to determine the level of competitiveness [22]. Accordingly, as regions are concentrated in the furniture manufacturing industry "General Competitiveness Index" and "Branding Skills and Innovation Competitiveness Index" values in Tables 4 and 5. Table 'is as visible.

Table 4. General Competitiveness Index

	2007-2008		2008	-2009	2009-2010	
	Row	Gen. Com. Ind.	Row	Gen. Com. Ind.	Row	Gen. Com. Ind.
Istanbul	1	86.33	1	86.83	1	86.01
Izmir	3	43.35	3	43.00	3	42.72
Bursa	4	35.21	4	35.45	4	35.10
Eskişehir	6	30.17	6	32.36	6	32.08
Bilecik	48	14.51	45	15.06	46	15.56
Ankara	2	49.68	2	49.35	2	49.73
Kayseri	9	26.84	13	26.75	12	27.16
Sivas	20	23.28	26	21.34	30	20.51
Yozgat	71	9.27	71	8.87	69	10.03

Table 5. Branding Skills and Innovation Competitiveness Index

_	2007-2008 Row Index Value		2008	3-2009	2009-2010		
			Row Index Value		Row	Index Value	
Istanbul	1	100	1	100	1	100	
Izmir	6	12.43	9	11.98	6	12.89	
Bursa	3	20.16	3	20.13	3	19.25	
Eskisehir	16	1.66	10	1.79	9	11.01	
Bilecik	38	0.18	39	0.18	41	0.22	
Ankara	2	22.07	2	21.54	2	23.27	
Kayseri	4	13.72	5	14.04	4	13.85	
Sivas	12	9.36	13	9.27	12	9.42	
Yozgat	67	0.02	68	0.02	68	0.03	

Ankara, the furniture industry is to investigate the relevance and clustering competitive advantage and ASO (Ankara Chamber of Industry) members held on 25 and fewer workers employ furniture firms trials reached 44 enterprises in [23]. This study of firms operating in the furniture industry and R & D outsourcing cases were investigated. Accordingly, R & D section of the job description, the R & D budget, the number of businesses in R & D outsourcing is 48%. During this 44 enterprises:

- Design unit and the purchase of services in addition to 12,
- Design unit, but the non-procurement of services 14,
- Design unit in service if the reception 5,
- There are 3 businesses that have any design unit nor purchase of services.

When developed by companies in the furniture industry and the commercial value due to product innovation of products that can be considered and taken into account their distribution, when the company alone, indicating that the 4005 and 7000 product innovations. When the exclusion evaluated, the product innovation of the products listed are found to be an average of 5.16 units per company. Corrected values of the total number of products developed in the industry has been seen as considering 28.67. Our results suggest that the proportion of the furniture industry has been faced with a value of approximately 0.18. These values, who want to maintain their presence in the highly competitive environment in the market for design and product differentiation efforts of Ankara region

refers to companies making significant investments and progress [23]

Ankara Development Agency, supported by the Direct Business Support Program 2010, ATO (Ankara Chamber of Commerce) and Gazi University, carried out in collaboration with "Ankara Industry Competitive Analysis" selected as a pilot study and the level of competition analyzed according to feasibility studies for the furniture industry [21]:

- Workshop on the Siteler is usually situated on the upper floors and basements, ground floors are used for shops or stores. These conditions and raw material transport difficulties, causing businesses to increase their productivity and lower production and distribution costs.
- Siteler neighborhood clustering furniture manufacturers, capacity utilization rate of 50% of the furniture manufacturing industry in general Ankara Although Turkey observed that closely follow consumer trends and marketing approaches in the furniture market is below 50%, indicating that the weak marketing and sales activities. However, with the development of business financial resources to overcome the shortcomings of the rapid development in this direction it has been shown to have the potential improvement efforts.
- Ankara and cost advantages of companies in the furniture industry, are experiencing uncertainty in orientation or focus on product differentiation strategy. Therefore, after assessing trends and competitive capabilities in proportion to Ankara furniture industry companies, it has emerged a strong belief in the direction they will increase the competitiveness of specialization.

METU (Middle East Technical University) is one of the other higher education institutions in Ankara Development Agency, the city and in 2011 the Planning Department of the collaboration, a survey provided 93% participation rate for the 4097 furniture company in Site to collect robust and reliable data is made. In this study, furniture companies manufacturing within the scope of sale of raw materials and exhibition-sales activities identified in three main categories, the sub-types of activity in terms of home furniture, office furniture, garden furniture, single-product specialized furniture, lacquer-painters, platers, upholstery, machinery manufacturing, joiner-carpenter, lighting, curtains, wood, plastic and aluminum-glass materials are listed as accessories dealer. According to the study [21]:

- Furniture and home based on the intensity of the activities of the arms business was seen that the production activities.
- An entity is seen as the most important factor in the first environment and energy issues, while 25.7%, respectively; skilled labor deficit, lack of capital, lack of R & D activities, the inability to professional organizations, the lack of international fairgrounds, difficulties in the growth and supply of raw materials imports is seen as a problem by the companies operating in the sector.
- Being a private company 68% of the furniture company site shows that the relatively low level of institutionalization of the furniture company.
- Furniture firms in Siteler are the vast majority of small businesses employing 1-9 employees as 91%. The average number of employees of companies at Siteler engaged in production across 5.

Most companies are aware of the importance of branding and stated that he was approaching 82% positive branding. However, a common branding is approaching 33% of the

mentioned negative. However, the proportion of those who find a positive approach to forming partnerships is 48%.

3.4 Elements of Competition in The Furniture Industry

Studies in recent years in our country, aiming to gain speed in the EU integration process, including and especially the Customs Union legislation and increasing the international competitiveness of the Turkish economy and the measures taken. The globalization process began in the 1990s and the rapid change in technology has made it clear to the world market, the local market has gained global level rather than speed in this race grabbing a share of the big cake.

21st century output and manufacturing sector directly related to housing, automotive, in sectors such as machinery is expected to impact the sector furniture intelligent approach of technological development in this direction is expected to act as a decline in production speed and cost of the furniture industry. Besides this, the last thirty years, with the appearance of intense effects of climate change have increased sensitivity to environmental and legal developments have gained pace. This situation has led to producers seeking to offer products that are sensitive to the environment and people. Turkey is party to the Kyoto Protocol as a result of which will enter into force as of 2018 the sector should be ready against legal requirements and sanctions. In addition, as of 2015, commercial tree, which he had grown the size until the final product is to be followed in the process of documenting the process and giving the certification of products is concerned. In this respect, the legislation in force, furniture and related international conventions to which our country forestry, editing and so on. The structures to ensure the continuity of renewal and freshness should be considering the creation and dissemination of technical support [16].

Basic elements of the furniture manufacturing industry competition; raw material costs, labor and energy costs with specialized / is the presence of clustered industrial zones. Businesses face higher costs due to industrial forestry is especially developed to be incurred for the supply of raw materials, better quality materials and are turning to imports in order to be able to provide. USA, Germany, Italy, Poland, Brazil, Vietnam, Indonesia, Malaysia and Sweden as countries are gaining a competitive edge through the use of high quality raw materials. In Turkey, the energy costs used in the art is quite higher than the competing countries. Labor costs in laborintensive sectors is still an important element of competition. As a sector labor costs in China, India, Indonesia, Vietnam, Malaysia, more than being compared to countries such as Egypt with Poland and other central European countries is low. The industry cluster structure (participants' growth and organized efforts aimed at improving the competitiveness / gatherings in a particular geographical area of all of the components operate in a particular area [24]) no surplus of small businesses, the height of the transportation costs lowers competitiveness. When compared on a global scale with Italy's cluster successful implementation, the United States, Canada, Brazil, Indonesia, countries such as Vietnam, rich, and have achieved a competitive advantage with high-capacity production centers in close proximity to high-quality raw materials [16]. Competitive parameters in the furniture manufacturing industry, as shown in Table 6. [14].

Table 6. Competition Parameters in Furniture Manufacturing Industry

industry					
Parameters	Decisive Factors Competition				
Raw Materials	Assets and Quality of Raw Materials				
14477 14401 1410	Sub-Industry				
Production	Raw Material Costs				
Froduction	Organized Production Zones				
	Product Standards				
m 1 1	Product Quality				
Technology Activities	Branding and Image				
Activities	Design Capacity				
	Eco-Friendly Production				
Marketing-Sales	Logistics Infrastructure				
	Distribution Network				
	Transportation Costs				
	Promotion and Fairs				
Fr 1	Profitability,				
Financing and Financial Structure	Credit Facilities and Costs				
rmanciai structure	Investment and Export Incentives				
	Presence of Trained and Qualified				
Human Resources	Human Resources				
	Work, Labor Law and Regulations				
Market and Sector	Import and Domestic Market Surveillance				
Conditions	Support Fair Competition and Ethical Conditions				

Product standards, product quality, branding and image, design capacity and is one of the key competitive factors for environmentally friendly production of furniture products. In our country, it has been observed that companies having large scale and corporate identity in certain distance have given importance to these technological variables much more. On the original furniture design and branding, common line called as Turkish-style furniture cannot be captured even though large scale firms have recently achieved progress by their labors. To ensure long-term place in the international market of the Turkish furniture industry, but by creating an international brand value can be provided to reveal the original design products. Therefore, to understand the importance of product design, branding and creating awareness about the elimination of the business of supply shortages, increasing employment and the amount of interest to be shown the training of furniture designers are required. Furthermore, imparting the quality of human potential existing in the design of the actors in the sector to ensure the development of a joint effort is needed [16].

Companies, competitiveness of industries and even countries are measured using different methods and are often used in these measurements and numerical data. Competitiveness is relatively easy for companies to identify, but to define the competitiveness of the country or region is more difficult. Globalization of international firms in the world, is claimed to be effective in determining competitiveness. According to this view, the basic elements of the competitiveness of the companies is innovation about products and / or production system [25].

Small scale enterprises in the more labor-intensive work environments, the number of employees are mostly composed

of businesses near the qualified staff and all the varying between 1-5 people. Medium-sized businesses, some laborintensive, while a half of labor-intensive, semi-intensive working capital. Large enterprises are producing are fully capital-intensive. Medium and large businesses have limited number of qualified employees. The vast majority of small businesses, based on some of the medium sized orders, and some do batch-type production, such as the large-scale enterprises. Altay and Gürpınar [25], between 2001-2006 study conducted in 2008 by the calculated index value of Turkey's furniture industry have put forward as a whole. The furniture industry in Turkey SITC REV. 3 CODE: comparative advantage for the 821 class products and competitiveness, Balassa's revealed comparative advantage index and reached according to Vollrath's competitiveness index results, despite increasing global competition, the Turkish furniture sector has been strengthening over time its competitive position. However, to improve the sector's competitiveness and sustainable in the future and to make production-oriented and cost control rather than R & D, design, and it is necessary to focus on more advanced competitive factors, such as marketing. Trained, skilled labor availability, factors such as physical and institutional infrastructure, operation of external economies and health resulting from the coexistence, factors affecting the level of public life such as education determines the degree of regional competitiveness. As long as a region can create external economies, it offers the opportunity to benefit from external economies extent, it will be competitive, attract more investment and this investment will work more efficiently. The creative capital of the region is related to how to use information differently from the human capital. Richard Florida of the University of Toronto faculty "creative class" concept is proposed and highly educated and creative people of some of the social environment in which they have pointed out that the city is due to bring together. Also to take into account the contribution to the competitiveness of the region's social capital, social capital index was created. Regional concentration of furniture manufacturers in the social capital index obtained when the five regions respectively like simplification: Istanbul/99; Izmir/89,6; Bursa-Eskisehir-Bilecik/74,4-80,5-66,6; Ankara/100; Kayseri-Sivas-Yozgat/55,4-40,3-26,1 [24].

3.5 Future Prospects for Turkish Furniture Industry

Between the years 1997-2000 the export cannot meet the import. But, the coverage ratio of export-import which followed a positive trend since 2001, have increased significantly between 2001-2005 and the momentum of the last 12 years (except for 2009) has been upward. Last 15 years (2000-2015), exports \$ 9.8 billion and imports \$ 6.5 billion is foreign trade balance yielded a total of more than \$ 3.3 billion with a 49% rate. This aspect of the Turkish furniture sector in the last 12 years have shown that the performance of national foreign trade deficit is one of the few sectors not. 2009 economic crisis caused by the recession as well as the last 5-year values due according to remain below 70% of capacity utilization sector 9th Development Plan [26] for about \$ 5 billion in estimated production volume stood at \$ 3.6 billion. Considering the growth rate of the sector in recent years, production of \$ 12.0 billion in 2018, while 2023 is expected to be \$ 22.1 billion. Turkey's targeted production volume of \$ 22.1 billion (5 times more than the current capacity) if it arrives, it is expected to become one of the largest furniture manufacturers in the world such as Japan, France, Poland, Italy, Germany, the United States and China. Domestic demand projections value is shown as billion \$ Tablo.7 [16].

3.6 SWOT Analysis for Turkey Furniture Industry

Furniture industry, export-import balance in Turkey's economy is characterized positively, is located in the country's economy of the carrier industry. Its great potential operating in the sector with a more consistent and secure step in the future of all stakeholders, will take the direction of growth in order to provide a guiding element for strategic decisions together industry SWOT analysis of the results obtained are made as follows:

Strengths

- The volume of production and distribution network
- o The geographical location of strategic importance
- o Openness of the sector to development and innovation
- o The height of the labor potential
- o The increase in new foreign markets quest
- The presence of increased number of successful initiatives in technology transfer and in modern production facilities
- o Excess variety of products and materials
- Industry self-confidence gained in the last 10 years of performance

Weaknesses

- Small and medium-sized businesses intensity
- o Lack of qualified staff and vocational training
- The original design and lack of intellectual property issues
- o High raw material costs and supply difficulties
- The lack of corporate identity gains
- Unconsciousness and unwillingness of the brand and quality approach
- o To meet consumer needs and expectations
- The lack of marketing activities
- Unregistered unfair competition caused by the excess production

- Support and guidance to small and medium sized firms in need of hearing
- The lack of an effective forest planning depending on whether industrial forestry
- Due to the lack of sufficient quality production equipment using old technology
- Accredited laboratories lack the needs of the sector

Opportunities

- The expansion of online sales opportunities due to increasing internet usage
- o The recent rise of innovative design
- Sympathetic to the cooperation and investment firms operating in the sector
- Increase of the production of smart furniture
- Developing production capabilities with a renewed technological infrastructure
- The shortening of the furniture renewal period, although changes in consumer behavior
- o The increasing number of companies' approach to enhancing customer satisfaction
- o The prominence of the branding and original design
- The spread of eco-design

Threats

- Energy costs
- The possibility of inadequate local forest resources
- Having a high production capacity at low cost realized China
- Economic pressure on other businesses off the record production due to the low standard
- o Inadequacy of preparation for fulfilling the requirements of the Kyoto protocol that we are a part

Table 7. Domestic Demand Projection Values (Billion \$) [16]

Furniture				Y	ears				Average Annual Increase (%)	Goal
	2011	2012	2013	2014	2015	2016	2017	2018	2013-2018	2023
Demand	4.267	4.779	5.352	5.994	6.713	7.518	8.420	9.430	%12	16.616
Production	5.016	5.668	6.405	7.237	8.177	9.240	10.645	12.002	%13	22.111
Export	1.606	1.899	2.122	2.440	2.806	3.226	3.710	4.266	%15	8.577
İmport	0.857	0.817	1.093	1.235	1.395	1.576	1.780	2.011	%13	3.703

4 Conclusion

Possible strategic decisions recommendations for possible improvements and future expectations based on the company related to the sector with the impact of their work in terms of competitive advantage differentiation in product design can be assessed if the following ingredients:

- Modern life, equipped with the technology will lead to the creation of furniture.
- By triggering changes in the scope of the design and function of urbanization and a rapidly growing furniture, enhancing the quality of life, easy to use, sensitive to people and the environment, functional, portable, modular furniture are expected to make an active role in the world market.
- Design process with the support of all stakeholders in the production process, customer-oriented design is the product of joint work with the management of the contribution of different areas of expertise will be focused on specific solutions. As these pave the way for work on behalf of the direction of the cluster / specializationoriented steps to be taken, there is a need to be supported.
- Advanced design skills, brand strength, values such as the effectiveness of after-sales service quality is emerging as factors that increase the competitiveness.
- Packing, packaging, transport costs in the development and the spread of disassembled furniture in transportation improvements in the area will increase the profitability of the product.

- Increase in marketing and sales activities will be followed over the Internet.
- It is expected to be of serious bottlenecks in the supply of raw materials if necessary measures on industrial wood are not taken.

5 Acknowledgment

This article was presented in full text at "II. International Furniture Congress" held in Mugla, Turkey, on 13-15 October 2016. As authors, we thank you in advance for the constructive criticism and recommendation of the future researchers who will grope this research.

6 References

- [1] M. Porter, New York: Free Press, 1985.
- [2] G. Hamel and C. Prahalad, Competing for the Future, Cambridge: Harvard Business School Pres, 1994.
- [3] E. De Bono, Sur-petition, New York: Harper and Collins Publishers, 1992.
- [4] V. Walsh, R. Roy, M. Bruce and S. Potter, Winning by Design, Oxford: Basil Blackwell, 1992.
- [5] M. Porter, Competitive Strategy, New York: Free Press,
- [6] B. Borja De Mozota, Design Management, İstanbul: Kapital Medya A.S., 2003.
- [7] F. Ürük, Tasarım Yönetimi ve Tasarımdaki Yeri, İstanbul: Mimar Sinan Güzel Sanatlar Üniversitesi, 2008.
- [8] A. Filiz, Üretim Yönetiminde Verimlilik Sırları, Sistem Yayıncılık, 2008.
- [9] M. Şahin, Üretim Yönetimi, Anadolu Üniversitesi Sahaf Yayınevi, 2008.
- [10] S. Yalçın, Müşteri Odaklı Yeni Ürün Geliştirme Aracı Olarak Hedef Maliyetleme ve Kalite Fonksiyon Yayılımının Mobilya Sektöründe Uygulanabilirliğinin Analizi, Kütahya: Dumlupınar Üniversitesi, 2005.
- [11] A. S. A. G. H. Kartal, Maliyet Muhasebesi, 2. Baskı ed., Eskişehir: Anadolu Üniversitesi Yayını, 2004.
- [12] H. Çınar, Mobilya Tasarım Yönetimi Ders Notları, Ankara: Gazi Üniversitesi, Fen Bilimleri Enstitüsü, 2006.
- [13] TOBB, "Türkiye Mobilya Ürünleri Meclisi Sektör Raporu," Türkiye Odalar ve Borsalar Birliği (TOBB), Ankara, 2013.

- [14] TOBB, "Türkiye Mobilya Ürünleri Meclisi Sektör Raporu 2014," Türkiye Odalar ve Borsalar Birliği (TOBB), Ankara, 2015.
- [15] İSO, "Küresel Rekabette İstanbul Sanayi Odası Meslek Komiteleri Projesi-Mobilya İmalatı Sanayi," İstanbul Sanayi Odası (İSO), İstanbul, 2015.
- [16] T.C. Kalkınma Bakanlığı, "Onuncu Kalkınma Planı 2014-2018, Mobilya Çalışma Grubu Raporu," T.C. Kalkınma Bakanlığı, Ankara, 2015.
- [17] MÜSİAD, "Dayanıklı Tüketim, Mobilya ve Orman Ürünleri Sektör Raporu 2014," Müstakil Sanayici ve İşadamları Derneği, İstanbul, 2015.
- [18] Ankara Kalkınma Ajansı, "Ankara Mevcut Durum Raporu 2011-2013," Ankara Kalkınma Ajansı, Ankara, 2011.
- [19] A. Aşarkaya, "Mobilya Sektörü," Türkiye İş Bankası A.Ş., 2015.
- [20] MOSDER, Tüketici Tutum, Davranış, Marka, İmaj ve Konumlama Araştırması, İstanbul: MOSDER (Türkiye Mobilya Sanayicileri Derneği), 2015.
- [21] Ankara Kalkınma Ajansı, "Siteler, Mobilya ve Ankara," Ankara Kalkınma Ajansı, Ankara, 2011.
- [22] K. Alkin, M. Bulu and A. Cangel, "İllerarası Rekabetçilik Endeksi 2009-2010," Uluslararası Rekabet Araştırmaları Kurumu (URAK) ve Deloitte Türkiye, İstanbul, 2011.
- [23] E. Erdil, M. Durgut, T. Pamukçu, M. Özman, H. T. Göksidan, D. Fındık, C. Çetin, D. Çetin, E. B. Kepenek, U. Y. Çetinkaya and S. Türkeli, "Kümeler, Sanayi Ağları ve İnovasyon (KÜSAİ): Ankara Bölgesi Makine ve Mobilya Sektörleri Örneği Projesi," METU-STPS, Ankara, 2007.
- [24] EDAM ve Deloitte Türkiye, "Türkiye İçin Bir Rekabet Endeksi," EDAM (Ekonomi ve Dış Politika Araştırmalar Merkezi) ve Deloitte Türkiye, İstanbul, 2009.
- [25] B. Altay and K. Gürpınar, "Açıklanmış Karşılaştırmalı Üstünlükler ve Bazı Rekabet Gücü Endeksleri: Türk Mobilya Sektörü Üzerine Bir Uygulama," vol. X, no. 1, pp. 257-274, 2008.
- [26] DPT, "Dokuzuncu Kalkınma Planı (2007-2013) Ağaç Ürünleri ve Mobilya Sanayii Özel İhtisas Komisyonu Raporu," Devlet Planlama Teşkilatı Müsteşarlığı, Ankara, 2006.