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INVESTIGATION ON CONTRIBUTION OF COMPETITIVENESS FOR PRODUCT DEVELOPMENT PROCESS OF THE CONCEPT OF DESIGN FOR EVERYONE IN THE FURNITURE INDUSTRY

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Abstract- In Turkey, the furniture industry has grown steadily in recent years, reaching 2.3 billion dollars from 177 million dollars with an increase of more than 12 quarters over 15 years' export value, constituting 1.5% of total national exports. With the work we have done, the effect on the competitive power in the product development processes of the product design that is out of the non-price elements of the firms operating in the Turkey furniture sector has been investigated to be carried out with the approach of design for everyone. With our research, the main objective is to contribute to the correct orientation of the potential of the competition in the furniture sector, the resources it has, the continuity of the performance of the sector and the sector in the medium and long term due to the national economy. In accordance with the purpose of the work, considering the outputs of past studies in order to determine the situation and future perspectives in the furniture sector, the effect of the design concept for everyone on the research and development activities of the product development process and possible implications of this effect on competitive advantage has been examined with a questioning approach. In this study, in terms of competitive superiority and availability of the sector, factors affecting demand, consumer habits and expectations, related and supporting industries, firm strategy, competitive structure of the sector and the role of the state have been discussed. These studies were carried out at the sectoral level and with the intensity centered on the design effect. Import-export values, consumption trends and buying habits statistics were used as basic data to determine the competitive power of the sector in international markets. The information that will form the basis of the diamond model analysis was made by moving from secondary sources.

Keywords- furniture industry, design for everyone, product development, competitive advantage.

Bu makale, 4. Uluslararası Mobilya ve Dekorasyon Kongresi'nde sunulmuş ve İleri Teknoloji Bilimleri Dergisi'nde yayınlanmak üzere seçilmiştir.

MOBİLYA ENDÜSTRİSİNDE HERKES İÇİN TASARIM KAVRAMININ ÜRÜN GELİŞTİRME SÜRECİNE YÖNELİK REKABET ÜSTÜNLÜĞÜ KATKISININ ARAŞTIRILMASI

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Özet- Türkiye'de mobilya endüstrisi son yıllarda sürekli bir gelişim göstererek 15 yıllık ihracat değerlerine göre 12 kattan fazla bir artışla 177 milyon dolardan 2,3 milyar dolara ulaşarak toplam ulusal ihracatın % 1,5'ini oluşturan bir konuma gelmiş bulunmaktadır. Yapmış olduğumuz çalışmayla, Türkiye Mobilya sektöründe faaliyet gösteren firmaların rekabet gücü üzerine etki eden fiyat dışı unsurlardan olan ürün tasarımının; herkes için tasarım yaklaşımıyla yürütülecek ürün geliştirme süreçlerindeki değişimin rekabet gücüne etkisi araştırılmıştır. Araştırmamızla, Türkiye Mobilya sektöründeki rekabet olgusu, sahip olduğu kaynaklar, sektörün performansının sürekliliği, sektörün ulusal ekonomideki önemi nedeniyle orta ve uzun vadede sektörün sahip olduğu potansiyelin doğru yönlendirilmesine katkı sunmak amaçlanmıştır. Çalışmanın amacına uygun olarak, mobilya sektöründe durum tespiti ve gelecek perspektiflerini belirlemek üzere geçmiş çalışmaların çıktıları dikkate alınarak herkes için tasarım kavramının ürün geliştirme süreçlerindeki araştırma-geliştirme faaliyetlerine etkisi ve bu etkinin rekabet üstünlüğüne olası yansımaları sorgulayıcı bir yaklaşımla incelenmiştir. Bu çalışmamızda, sektörün sahip olduğu rekabet üstünlüğü ve mevcudiyeti bakımından; talep üzerindeki etkenler, tüketici alışkanlıkları ve beklentileri, ilgili ve destekleyici endüstriler, firma stratejisi, sektörün rekabet yapısı ve devletin rolü ele alınmıştır. Söz konusu incelemeler sektörel düzeyde ve yoğunlukla tasarım etkisini merkeze alarak yapılmıştır. Sektörün uluslararası pazarlarda rekabet gücünü belirlemek için ithalat-ihracat değerleri, tüketim eğilimleri ve satın alma alışkanlığı istatistikleri temel veri olarak kullanılmıştır. Elmas modeli analizine temel oluşturacak bilgilerse, ikincil kaynaklardan hareket ile gerçekleştirilmiştir.

Anahtar Kelimeler- mobilya endüstrisi, herkes için tasarım, ürün geliştirme, rekabet üstünlüğü.

1. INTRODUCTION

Design for everyone is the idea that the intended environment or product features look and feel normal. Products obtained with universal design approach; physical disability, age-related physical limitations, and other users who have different characteristics from the common users [1].

In this context, product development includes the conceptualization, design, development and marketing phases of the products. The aim of the furniture industry for product development of the design concept for everyone; with changing market conditions, to meet consumer demand, to protect the competitive position of the product and to increase its market share. The definition of the target market for every product designed and developed for everyone in the furniture industry needs to be carefully carried out to develop the product development process for the customer base. The competitiveness contribution of the design concept for everyone to the product development process in the furniture industry depends on the ability to create large areas of meaningful differentiation and focuses on what can be done to enhance the client's preference for what the differentiation strategies that are valued by the client can be and how come to realize.

2. CONCEPTUAL FRAMEWORK

2.1. DESIGN FOR EVERYONE / UNIVERSAL DESIGN

The term "universal design" was first used by architect Ronald L. Mace in the mid-1980s. The environment built according to the principles of this approach is the structure that all people can use. For example, the need for ramps for physical handicaps, entrances without stairs, kitchen counter-like applications that can be altered in height relative to the user regulated according to this design approach [1]. Universal Design adopts the principle "Everyone should be given equal opportunity". Is based on the discourse of "the separated one is not equal" [2]. It is the user who is the basis for universal design and it is not only disabled people but all people who get the subject. The main idea that has been addressed in the approach is basically that all people have some kind of disability, for various reasons, such as age, skill loss, disability. In society, designs made on the basis of the existence of perfect and skillful human perception as "normal human" push the disabled or elderly individuals out of the evaluation by differentiating in the negative. However, designs based only on the perception of "normal human" are incompatible with real conditions [3].

The main purpose of universal design is not to adapt people to the place, but to adapt the place to people. Taking into consideration the needs of different users, it is necessary to increase the efficiency of the place and make it possible for the users to use the place easily and reliably.

2.1.1. Principles of Universal Design

Founded by Ronald L. Mace in 1989, the University of North Carolina State University in 1996 received the name of the Universal Design Center. In 1997, this center published seven principles to make the concept of "universal design" understandable and to guide. The concept of universal design, which is fundamental to these principles, is a design and thought an approach that aims to enable physical places and different products to be used by people at every level of competence. Here is the list of seven principles that the universal design approach adopts [1].

1. **Equitable use:** Design should be available on equal terms for individuals with different levels of competence. Security and privacy-related rules should be included and satisfied all users without any further customization among users.
2. **Flexibility in use:** Design involves different individual preferences and competencies. It should be suitable for different usage patterns.
3. **Simple and intuitive use:** The design should be easily understandable regardless of the user's knowledge, experience, skill, and instant focus. Unnecessary complexity should be avoided. The user's expectations and intuitive handling should be appropriate.
4. **Detectable information:** The design should provide the information necessary for the user, regardless of ambient conditions or the user's sensory perception skills. The "readability" of the basic information should be at the highest level.
5. **Tolerance for mistakes/errors:** Design, accidents or unwanted behavior dangerous and bad consequences that may arise as a result should minimize. The most used of the design elements should be the most accessible, and the ones that can cause the hazard should be destroyed, isolated or sheltered.

6. **<u>Low Physical Power Requirement:</u>** Design should be effective and comfortable use, should allow a minimum degree of fatigue. The user should not have to keep his body in unnatural positions. The product is in acceptable degree, non-repetitive and should be able to operate by using the short-term power.
7. **<u>Appropriate Size and Space for Approach and Use:</u>** Appropriate size and area should be provided for approach, reach, hand use, and general use, regardless of the user's body measurements, posture position and movement. Sufficient space must be provided for assistive devices (wheelchair, walking equipment, etc.) or for those who will be assisted.

2.2. PRODUCT DEVELOPMENT

According to the definition made by Filiz [4], product development, a process that aims to present a product that is more suitable for consumer needs than the current product to market. Such that product development; It means to differentiate, re-create or even convert the product into another product, to gain physical appearances and functional differences, or to improve the quality of production or to reduce the cost of production.

<u>New Product:</u> Although described as a product never before on the market, today four types of new products can be mentioned. These are "real new product"; "new for company, non-new product for market"; "The presentation of to the market by adapting a product produced in other countries" and “The product that the manufacturer offers to market by making changes.” [4].

<u>Product Life Cycle:</u> The products have life cycles that can be handled in terms of economically and company. Products are also born, grow, and then enter a period of stagnation and decline begins. The shrinking of the sales figures and accordingly the increase of the costs of the products are the signs that the economic life of the product is completed [4].

<u>New Product Design:</u> According to Sahin [5], new product design is a working process; to determine what kind of materials will be used in the new product to be presented to the market, to determine the size and quality values, to determine the visual structure and to set the standards of success.

2.3. COMPETITIVE ADVANTAGE

While Hamel and Prahalad [6] define the concept of competition for the long-term future and regard it as activities to be introduced for future opportunities, De Bono [7] stated that a competitive advantage will be achieved as soon as it can create and manage built-in values. The variables affecting the competition are shown in Table 1.

Table 1. Factors Directing Competition [8].

Factors Directing Competition		
Price Factor	**Product Factor**	**Management Factor**
Sale price	Quality/Reliability	Delivery time
Campaigns	Aesthetic	After-Sale Service Quality
Payment Diversity	Usefulness	Distribution and Service Network
Operating Costs	Ease of Maintenance	Spare Parts Warranty
Service Costs	Ergonomic	Advertisement
Amortization	Portability	Consumer Friendly Products

Competition is a struggle for different people, institutions or organizations to achieve the same goal, while competitiveness is a determined and measured situation against a competition. Competitiveness of the companies are evaluated by their performance on the market. Companies with high competitiveness increase their share by creating more value. Technological infrastructure, qualified labor force, experience and skills of management, as well as companies strategies and competitions, quality of input, demand conditions and support industries constitute external influences that determine competitive power [9].

The international competitiveness has generally been dealt with two-dimensionally as micro (company and industry) and macro (country). At the micro approach, competition between enterprises in the national market, and the competition of national / international market when examining the effects of, the country's position in international competition at the macro approach was investigated. Competitiveness according to the definition of the Industrial Competition Commission; Is that countries try to increase real incomes of citizens under free and established market conditions while they are able to present their products and services to international markets and be successful [10].

According to some economists, the competitiveness of the national economy is a macroeconomic phenomenon; Foreign exchange rates, interest rates and budget deficits. Foreign trade and foreign capital investments can enhance or threaten the productivity of production in a country. These two factors can increase the importation of sectors in which the firms in that country specialize in sectors that are more productive and in which sectors where production is less productive. These factors lead to a test of whether the productivity of production in national industries is at international standards. According to classical thinkers, countries trade according to their comparative advantages based on production specialization, taking into account their superior goods and services. The modern foreign trade approach also suggests that countries prefer goods and services with comparative advantages in production specialization [11].

According to the National Institute for Management Development, competitiveness in the institutional sense is the ability to create an environment in which an individual can continuously increase in added value [12]**.** Competitiveness of a country shows the competitiveness of the products it manufactures with competitor country products in terms of price, quality, design, reliability and on-time delivery [13].

Competition in an industry generally determined by five fundamental elements and directed: The new threats to enter the sector; competition between existing firms; buyers' bargaining power; bargaining power of suppliers; product and service threats that may be involved [14].

There are three basic strategies generally applied to achieve competitive advantage; Cost leadership, differentiation and focus. In general, the cost can be raised backwards, but it can increase considerably in proportion to the quality of the raw materials and the technology used. Differentiation provides a strong and defensible position for the firm, although it requires compelling research, development and design work that requires more labor and financial resources [15].

2.4. DIOMAND MODEL

Porter has implemented more than 100 example industries in ten countries (USA, Germany, Japan, Denmark, Italy, Sweden, United Kingdom, South Korea and Singapore) with Diamond Model (Diamond Model) developed to analyze competitive power at business and sector level. The model exploring why some nations are more competitive in certain sectors than others is concerned with examining the interaction of factors that determine national competitiveness in a sector [16]. In the model, there are four main factors in determining the competitiveness of the countries, which are the four corners of the diamond. It mentions that two indirect factors must be examined in addition to the main factors [17]. The visual structure of the model is shown in Figure 1.

3. RESEARCH

3.1. WORLD FURNITURE INDUSTRY

Furniture manufacturing, continuous improvement over the years in the manufacturing industry and is an industry that continues its growth outlook. Together with the main and subsidiary industries, the production value of the world furniture industry has reached $ 350 billion in 2004, up from $ 66 billion in 2008. The volume of production, which declined to $ 341 billion in 2010 due to the impact of the global crisis, continued to improve again in the ongoing process, reaching $ 446 billion in 2013 [18]. According to the 2011 data, China, the United States, Italy and Germany, which led the world in furniture production, have realized more than half of world production [19]. China, which has increased production capacity and volume by using production cost advantages in recent years, is in a position to make a quarter of world furniture production in 2013 and is the first with an export value of $ 60.1 billion. Despite being the second largest producer, the US is the largest importer with $ 42.1 billion in import value.

The EU (European Union) group countries, on the other hand, have advanced production power especially in terms of design, quality and brand. From these countries, Italy and Germany stand out with their expertise, qualities and brands, while emerging countries such as Poland, Brazil and Vietnam are among the largest producers with production capacities and production volumes. The largest market for consumption in the world is the US with $ 88.4 billion (20.3%) and China is the second largest market with $ 75.8 billion (17.4%) [18].

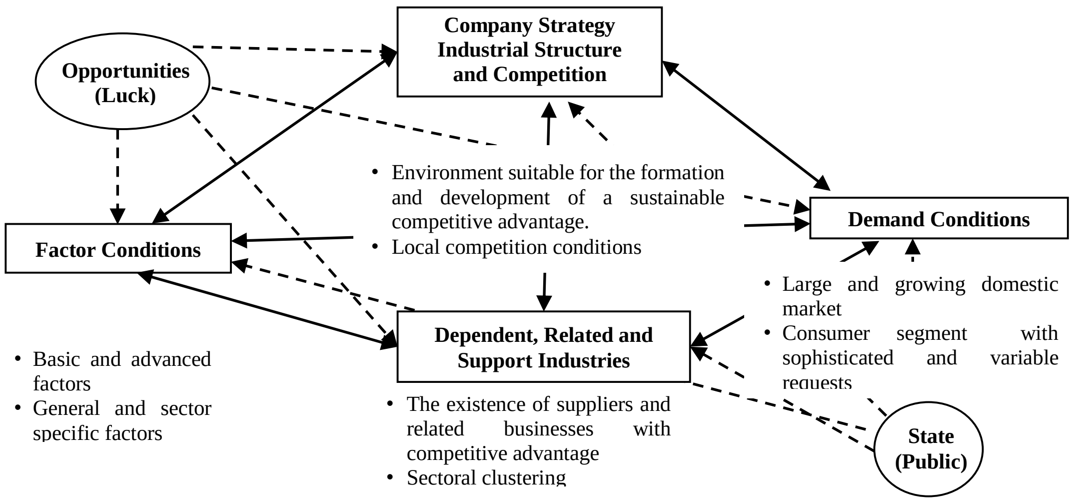

Figure 1. Porter's Competition Power –Diomand Model-[16].

3.2. FURNITURE INDUSTRY IN TURKEY

In the fast-developing sector, Turkey aims to be one of the top 10 producers in the world and one of the top five producers in Europe with a production of $ 25 billion and an export expectation of $ 10 billion for 2023 [20]. In the first six months of 2014 data, the furniture sector is the third sector with the best performance compared to the previous year, after the investment partnership in the first place and automotive subsidiary in second place. In the case of net profit increase, it is the 16th sector among 39 sectors and it is the second sector that maximizes equity profitability [21].

In the furniture manufacturing industry, trademark registrations and industrial design registers are important indicators in high value-added production and branding. According to the data of Turkish Patent and Trademark Agency, the number of trademark registered in the furniture manufacturing industry has increased rapidly between 2000 and 2013, reaching 2,663 and the number of industrial designs registered in the same period was 1,719 [18].

The furniture sector in Turkey has been clustered in Istanbul, Ankara, Bursa (İnegöl), Kayseri, İzmir and Adana according to the ratios in total production [22]. According to ISIC Rev.3.1 (International Standard Industrial Classification of All Economic Activities) code according to the statistics of Turkish Statistical Institute (TURKSTAT), the last five years' trade value in the "3610-Furniture Manufacture" class is as given in Table 2.

Table 2. Export Data According to ISIC Rev.3.1, Regions / Sections for Furniture Manufacturing [23].

Regions	Values ($)	YEARS				
		2013	2014	2015	2016	2017 (Temporary Data)
Ankara	Export	141.788.567	153.724.574	112.075.367	113.781.908	50.256.204
	Import	37.099.309	43.103.961	35.320.327	22.124.064	9.579.190
	Balance of Foreign Trade	104.689.258	110.620.613	76.755.040	91.657.844	40.677.014
Bilecik	Export	206.450	47.657	1.268.566	134.204	26.184
	Import	4.098	8.320	4.712	-	-
	Balance of Foreign Trade	202.352	39.337	1.263.854	134.204	26.184
Bursa	Export	503.425.502	541.742.418	492.503.421	541.032.270	302.262.462
	Import	77.575.980	66.867.548	51.550.354	45.089.479	25.984.890
	Balance of Foreign Trade	425.849.522	474.874.870	440.953.067	495.942.791	276.277.572
Eskişehir	Export	6.742.885	7.143.620	5.358.658	6.286.808	4.341.949
	Import	397.135	454.336	394.410	359.605	377.404
	Balance of Foreign Trade	6.345.750	6.689.284	4.964.248	5.927.203	3.964.545
İstanbul	Export	579.097.272	651.667.347	553.935.101	535.372.684	274.678.768
	Import	565.882.778	563.512.073	501.847.512	362.618.512	179.962.634
	Balance of Foreign Trade	13.214.494	88.155.274	52.087.589	172.754.172	94.716.134
İzmir	Export	97.684.151	105.447.525	110.427.742	94.141.439	48.028.229
	Import	18.577.703	22.099.679	14.733.826	11.553.420	4.730.030
	Balance of Foreign Trade	79.106.448	83.347.846	95.693.916	82.588.019	43.298.199
Kayseri	Export	366.612.099	372.268.221	365.086.815	367.837.056	194.636.494
	Import	41.598.380	32.118.432	36.745.207	8.113.282	2.001.203
	Balance of Foreign Trade	325.013.719	340.149.789	328.341.608	359.723.774	192.635.291
Sivas	Export	3.010.822	3.783.776	1.499.080	2.746.418	3.236.884
	Import	523.106	113.317	364.592	52.519	-
	Balance of Foreign Trade	2.487.716	3.670.459	1.134.488	2.693.899	3.236.884
Yozgat	Export	67.045	85.750	309.269	227.843	48.468
	Import	-	3.286	-	-	-
	Balance of Foreign Trade	67.045	82.464	309.269	227.843	48.468
TOTAL	Export	1.698.634.793	1.835.910.888	1.642.464.019	1.661.560.630	877.515.642
	Import	741.658.489	728.280.952	640.960.940	449.910.881	222.635.351
	Balance of Foreign Trade	**956.976.304**	**1.107.629.936**	**1.001.503.079**	**1.211.649.749**	**654.880.291**

According to the "income and living conditions" survey conducted by TURKSTAT in 2010, furniture in household expenditures; According to the spending values of the five income groups composed of 20% slices, they are in fifth place after renting of housing, food, transportation, restaurants and hotels [20]. According to this study done by MOSDER (Association of Turkish Furniture Manufacturers), the average furniture renewal frequency in Turkey is determined as 9 years according to this study that is done on 15 regions and 1031 people [24].

Due to population and demographic changes as well as improvements in purchasing power, household spending habits have also changed, and the share of furniture expenditures and the variety of demanded furniture products has also begun to increase. Regarding the causes that affect consumers' decision to purchase furniture, renewal, space change-moving, marriage, fashion trends and campaigns seem to be effective [18].

3.3. COMPETITION FACTORS IN FURNITURE INDUSTRY

With the studies carried out in recent years, it has been aimed to increase the international competition power of the Turkish economy. It is inevitable that the approach of intelligent systems, which has been introduced in recent years and will lead to drastic changes in the industrial system in the near future, will also affect the furniture industry. Technological developments and changes in this direction are predicted to affect the increase in the production rate in the sector and the decrease in costs. In addition, due to the fact that Turkey is a party to the Kyoto Protocol, the sector must be prepared against the legal obligations and sanctions to be implemented from 2018 onwards [19].

Countries such as the USA, Germany, Italy, Poland, Brazil, Vietnam, Indonesia, Malaysia and Sweden all have superior advantages in terms of access to quality raw materials. Labor costs in Turkey are lower than Poland and other central European countries, with more than competitor countries such as China, India, Indonesia, Vietnam, Malaysia and Egypt. The lack of sectoral clustering, the surplus of small businesses, and the high cost of transport reduce competition. By comparison with the world scale, countries such as the US, Canada, Brazil, Indonesia and Vietnam have achieved competitive advantage thanks to their high-quality production centers and their close proximity to rich and high quality raw materials [19]. The competition parameters in the furniture manufacturing industry are as shown in Table 3 [25].

Table 3. Competition Parameters in Furniture Manufacturing Industry

Parameters	Determinative Competitive Elements
Raw materials	• Existence and Quality of Raw Material Sources • Sub-industry
Production	• Raw Material Costs • Organized Production Zones
Technology Activities	• Product Standards • Product Quality • Branding and Image • Design Capacity • Eco-Friendly Production
Marketing-Sales	• Logistics Sub-Structure • Distribution Network • Transportation Costs • Promotion and Fairs
Financing and Financial Structure	• Profitability • Loan Opportunities and Costs • Investment and Export Incentives
Human resources	• The existence of Educational and Qualified Human Resources • Work, Business Laws and Regulations
Market and Sector Conditions	• Imports and Internal Market Supervision • Fair Support and Ethics Competition Conditions

Product standards, product quality, branding and image, design capacity and environmentally friendly production are important competitive factors for furniture products. In our country, it has been observed that firms pay more attention to these technological variables with a certain distance in gaining large scale and corporate identity. In Turkey, in recent years in the field of original furniture design and branding, large-scale companies, even if their own efforts, but the Turkish-type furniture could try to catch a common line. The fact that the Turkish furniture industry can take place in the international market as a long term can only be achieved by creating an international brand value and presenting originally designed products. For this reason, it is necessary to understand the concept of product design, to raise awareness about branding and to solve the source troubles of enterprises, to show the necessary interest to educate the furniture designers and to increase the amount of employment. In addition, common stakeholders of the sector are needed to qualify and enhance existing human potential in design [19].

The competitiveness of firms, industries and even countries is measured using different methods and usually by numerical data. It is argued that international firms in the globalizing world are effective in determining competitive power. Again, according to this view, the key element in providing competitive strength to the firm is innovation in product and / or production systems [26].

Altay and Gürpınar [26] have presented the index values of Turkey's furniture sector as a whole between 2008-2006. SITC REV. 3, CODE: The result, based on comparative advantage and competitive power for Class 821 products, Balassa's stated comparative advantage index and Vollrath's competitiveness indices, is that the Turkish furniture sector has strengthened its competitive position over time, despite the increasing global competition. However, in order to improve and sustain the competitive power of the sector, it is necessary to concentrate on more advanced competition elements such as research, design and marketing instead of production-oriented and cost control.

A region will be as competitive as outside economies can afford, able to benefit from external economies, will attract more investment, and these investments will work more efficiently. Unlike human capital, the creative capital of a region is related to how much information it can use. Richard Florida advocates the concept of "creative class" and points out that some cities have come to the fore thanks to the social environment they have brought together highly educated and creative people. A social capital index has also been created to take into account the contribution of social capital to the competitiveness of a region. The social capital indices of the five regions obtained when the furniture manufacturers are simplified by their intensified regions are respectively: İstanbul / 99; Izmir / 89.6; Bursa-Bilecik-Eskisehir / 74,4-80,5-66,6; Ankara / 100; Kayseri-Sivas-Yozgat / 55,4-40,3-26,1 [27].

3.4. FUTURE EXPECTATIONS FOR TURKISH FURNITURE SECTOR

From 1997 to 2000, foreign trade deficit was on the rise, but since 2001, the import-export coverage rate has been on a positive trend, showing a significant increase between 2001 and 2005 and continuing upward for 12 years (excluding 2009). Exports for the last 15 years (2000-2015) were $ 9.8 billion, imports were $ 6.5 billion, and the trade balance gave a total surplus of $ 3.3 billion, with 49%. The Turkish furniture sector is one of the few sectors that did not open foreign trade deficit at the national level with its performance in the last 12 years. In the 9th Development Plan [28], the production volume estimated at $ 5 billion was $ 3.6 billion, due to the narrowing of the cause of the 2009 economic crisis, as well as the industry's capacity utilization rate below the last 5 years' value. Given the recent growth rate of the industry, production is expected to be $ 12.0 billion in 2018 and $ 22.1 billion in 2023. It is expected that Turkey will become one of the world's largest furniture producers such as Japan, France, Poland, Italy, Germany, USA and China, if Turkey reaches its targeted production volume of $ 22.1 billion (5 times more than current capacity) [19].

3.5. INVESTIGATION OF SECTOR WITH DIAMOND MODEL

3.5.1. Factor (Input / Production Factors) Conditions

Factors influencing the competitive power of the Turkish furniture sector: labor, finance, technology, raw materials and design.

- **Qualified Workforce:** In the EU accession process, the rate of use of the new generation technology in production by the Turkish furniture sector is increasing rapidly. However, a large part of the industry still uses labor-intensive workforce.
- **Financing:** Generally, small-scale enterprises have high production costs because they operate inefficiently with low capacity utilization rates. The furniture sector in our country does not have a specific capital accumulation since they generally produce according to the order of small workshops.
- **Technology:** In the sector, some of the medium-sized enterprises are labor-intensive, while others are semi-labor intensive. In large enterprises, automation is used more intensively.
- **Raw Material:** In Turkey, wood, chipboard, coating, hardware and so on. It cannot compete with imported materials to the extent that they are available at reasonable cost and quantity for quality material, even though it is a suitable raw material supply.
- **Design:** Furniture production in Turkey is not in the desired position in terms of export figures. The main reason for this is the fact that modern furniture designed as Turkish Furniture does not produce identifiable furniture that conforms to a certain definition in the global market. The design should be universal, as it can respond to all kinds of human elements, as well as to count each individual in the audience of the target user.

3.5.2. Company Strategy, Industrial Structure and Competition

The Turkish furniture sector is one of the few sectors that have not shown foreign trade deficit at the national level in recent years. If Turkey reaches its targeted production volume of $ 22.1 billion in 2023, it is thought to be among the world's largest furniture producers such as Japan, France, Poland, Italy, Germany, USA and China [19]. The result obtained when GZTF (SWOT) analysis of the sector is made is as shown in Table 4.

Table 4. SWOT Analysis for Turkish Furniture Sector [9].

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Production and distribution network	Excess of small & medium enterprise. Ratio	Spreading online sales	Energy costs
Geographic location	Qualified labor shortage	Increase in innovative designs	China factor
Openness to innovation	Low original design and low number of patented products	Firms' cooperation and investments	Unfair competitive pressures on informal production
Increase in outward opening	Raw material procurement costs	Increased production of smart furniture	Inadequate preparations for the kyoto protocol
Technological development and change	Lack of institutionalization and specialization	Renovated technological infrastructure	
Product and material variety	Lack Of An Academic Laboratory	Increasing number of firms that show an approach to increase customer satisfaction	

Especially in the furniture industry, it is observed that product variety has increased in recent years. The main driving force of this diversity is the variability and multiplicity of the demands of consumers with the efforts to increase the market share of firms. Few of the furniture manufacturers are investing in education, research and innovation. Companies that realize this and have awareness are also generally separated because they are large-scale and target foreign markets. This causes our country to fall behind in its product development, new investments and technology development fields compared to its competitors in the world.

Each national economy is as competitive as its ability to achieve universal consumerism, which offers superior, quality, cost and aesthetic appeal as well as branding success in industry. Brand awareness of prominent manufacturers in the sector should also be widespread in businesses at the level of small and medium-sized enterprises. In order for the Turkish furniture sector to be able to compete with competitors in close and distant foreign markets and to maintain continuity in it, Cost, quality, aesthetic appeal, and functionality that are influential on consumer preferences.

3.5.3. Affiliated, Related and Supporting Industries

Strong and dynamic related and supportive industries in an internal market of a country are also positively influencing the global competitive power. This aspect of the model involves the importance of businesses that directly or indirectly affect a selected industry. This concept usually includes distributors with mainstream industry suppliers. In this model, it is suggested that the mainstream industry will be stronger when the corresponding side and supporting industries are strengthened. It is also clear that supporting industries with high competitive power will be able to feed the focus industry in a way that will increase competition power.
They are the only big companies that can make their own distribution and sales network that can carry out their direct sales activities in online environment with the spread of communication opportunities in today's market conditions. Access to foreign markets does not exist in a global competitive environment due to the weakness of our small and medium-sized enterprises at the point of creating and transporting company value on the corporate and product basis.

3.5.4. Demand Conditions

It is inevitable for consumers to become more conscious of the fact that access to information has become very easy and fast because of today's technology and communication facilities. Therefore, at the point of purchase, they have knowledge about all the features of all the products that exist in the market and have the tendency to turn to the product that is most compatible with their needs and expectations. For this reason, the marketing problems are increasing and the companies are faced with intense competition, developing new products, searching new market segments, finding new distribution strategies, encouragement / campaign etc. Have increased the importance of their work.

3.5.5. State Factor

The excess of informal production and sales activities is not only negative for the tax system, but also creates an unfair competition environment for the big enterprises in the effort to create national identity in product design due to poor quality production. In order to remove this situation, it is necessary to increase the number of publicly funded inspections and to monitor the deterrence of sanctions.

3.5.6. Chance/Luck Factor

Because of natural disasters, regional and global economic fluctuations, fluctuations in the market and fluctuations in demand during the enlargement process and the shift of supply and demand centers due to war and conflict environments can be considered as a chance factor. It is also clear that businesses in the sector will gain competitive advantage in terms of their ability to anticipate and adapt to new situations that will arise through the influence of such variables.

4. CONCULUSION AND DISCUSSION

In Turkey, it is seen that the furniture sector, which is usually made up of small-scale firms and the majority of which are family companies, are located in furniture clusters such as Istanbul, Ankara, Bursa (Inegol), Kayseri, İzmir and Adana. However, it seems that this clustering in the mentioned enterprises is not only concentrated in the raw or market positions, but it is also technically specialized and there is not an intensive cluster of cooperation opportunities with local suppliers. The high proportion of professional managers and qualified labor force affects the competitiveness of enterprises in the international arena negatively. It is necessary for companies in the sector to benefit from international financing facilities at the point of financing new investment and renovation activities for financial recovery and physical production factors in existing operation operations and to work jointly with international financial institutions, development and investment banks.

In recent years, changes and improvements in design units of large-scale companies have made it possible to introduce internationally accepted designs. In order for the Turkish furniture sector to be able to compete and stay in close and distant foreign markets, successful designs in world standards are needed in terms of variables such as cost, quality, aesthetics and functionality that affect consumer preferences. In recent years, it has been necessary to put forth a common effort in the acquisition of the identity of "Turkish Furniture" as conceptualized by various researchers. When we look at the furniture sector as a whole, it can be said that while the vast majority of the small and medium-sized enterprises-intensive sectors do not follow a market-oriented strategy, the exporting enterprises try to fulfill the requirements of such strategies. In addition, bureaucracy and legislation should be simplified by taking into account similar applications in the EU and the world, Taxation and social security legislation should be improved; Incentive measures should be taken to increase installation, investment and employment.

The ability to anticipate new situations that may arise in the furniture industry and adapt to acting by adapting to it will provide a competitive edge. Early and effective response to developments on the agenda for products modeled on a universal user basis, with brand-value, adopting the design concept for everyone and involving the entire consumer segment, will provide global competitive advantage to businesses operating in the sector.

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