

POSITION OF DESIGN AND THE DESIGNER IN LOW-TECH SMALL AND
MEDIUM SCALE FURNITURE INDUSTRY IN TURKEY

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
THE MIDDLE EAST TECHNICAL UNIVERSITY

BY
MEHTAP ÖZTÜRK ŞENGÜL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
INDUSTRIAL DESIGN

FEBRUARY 2009

Approval of the thesis;

**POSITION OF DESIGN AND THE DESIGNER IN LOW-TECH SMALL AND
MEDIUM SCALE FURNITURE INDUSTRY IN TURKEY**

submitted by **MEHTAP ÖZTÜRK ŞENGÜL** in partial fulfillment of the requirements for the degree of **Master of Science in Industrial Design Department, Middle East Technical University** by,

Prof. Dr. Canan Özgen
Dean, Graduate School of **Natural and Applied Sciences**

Assoc. Prof. Dr. Gülay Hasdoğan
Head of Department, **Industrial Design**

Assoc. Prof. Dr. Gülay Hasdoğan
Supervisor, **Industrial Design Dept., METU**

Examining Committee Members:

Assoc. Prof. Dr. Mehmet Asatekin (METU, ID)
Industrial Design Dept., METU

Assoc. Prof. Dr. Gülay Hasdoğan (METU, ID)
Industrial Design Dept., METU

Assist. Prof. Dr. Naz Börekçi (METU, ID)
Industrial Design Dept., METU

Assist. Prof. Dr. Fatma Korkut (METU, ID)
Industrial Design Dept., METU

Ece Yalım (Industrial Designer)
Ece Yalım Design Studio

Date: February 12, 2009

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name: Mehtap Öztürk Şengül

Signature:

ABSTRACT

POSITION OF DESIGN AND THE DESIGNER IN LOW-TECH SMALL AND MEDIUM SCALE FURNITURE INDUSTRY IN TURKEY

Öztürk Şengül, Mehtap

M.S., Department of Industrial Design

Supervisor: Assoc. Prof. Dr. Gülay Hasdoğan

February 2009, 127 pages

Increasing competition and technological improvements have created new challenges for the firms. In Turkey, low-tech small and medium scale furniture industry does not seem to be well equipped to compete in this respect due to their weak economic and cultural capital. Necessity of innovative and distinguishing design-led policies has already arisen for improving the position of the low-tech small and medium scale furniture producers. However, to generate effective policies for them, it is essential to understand the design process and production domain related to cultural factors which affect the position of design and the designer. Within this perspective, this thesis examines the position of design and the designer within the product development process in eight cases of small and medium scale furniture companies based on the data gathered from, firstly, in-depth interviews with the owners, and secondly, product development stories narrated by the owner, the designers and head of the production departments of the companies.

Keywords: new product development, position of design and the designer, small and medium scale furniture industry, professionalization of design, habitus, furniture production field

ÖZ

TÜRKİYEDE DÜŞÜK TEKNOLOJİLİ KÜÇÜK VE ORTA ÖLÇEKLİ MOBİLYA ENDÜSTRİSİNDE TASARIM VE TASARIMCININ YERİ

Öztürk Şengül, Mehtap
Yüksek Lisans, Endüstri Ürünleri Tasarımı Bölümü
Tez Yöneticisi: Doç. Dr. Gülay Hasdoğan

Şubat 2009, 127 sayfa

Artan rekabet ve teknolojik gelişmeler firmalar için yeni sorunlar ortaya çıkarmıştır. Bu durumda düşük teknoloji, küçük ve orta ölçekli mobilya endüstrisi, zayıf ekonomik ve kültürel sermayesi nedeni ile rekabet etmek için yeterince donanımlı görünmemektedir. Düşük teknoloji, küçük ve orta ölçekli mobilya üreticileri için tasarımın yönlendirdiği, yenilikçi ve farklılaştırıcı politikalar ihtiyacı halihazırda ortaya çıkmıştır. Ancak, etkili politikalar üretmek için tasarımın ve tasarımcının pozisyonunu etkileyen, tasarım süreci ve üretim alanıyla ilişkili kültürel faktörlerin anlaşılması gereklidir. Bu bakış açısıyla, tez düşük teknoloji, küçük ve orta ölçekli mobilya firmalarının sekiz tanesinde ürün geliştirme sürecinde tasarımın ve tasarımcının pozisyonunu firma sahipleriyle yürütülen derinlemesine mülakatlar ve daha sonrasında da firmaların sahipleri, tasarımcıları ve üretim birimi sorumluları tarafından anlatılan ürün geliştirme hikayelerinden elde edilen verileri temel alarak araştırmıştır.

Anahtar Kelimeler: yeni ürün geliştirme, tasarım ve tasarımcının yeri, küçük ve orta ölçekli mobilya endüstrisi, tasarımın profesyonelleşmesi, habitus, mobilya üretim alanı

ACKNOWLEDGEMENTS

First of all, I would like to express my deepest gratitude to my thesis supervisor Assoc. Prof. Dr. Gülay Hasdođan for her guidance and encouragement and also for allowing me to study on such an unortodox subject. The members of the examining committee, Assoc. Prof. Mehmet Asatekin, Assist. Prof. Dr. Naz Breki, Assist. Prof. Dr. Fatma Korkut, Ece Yalım, provided me with important insights. I would like to thank them for this. I also like to thank to the participants of my case study, they gave their time and shared their experience and stories related to my thesis subject with me. I want to thank to my all friends and all people who support me, especially to Hale Altınova for her friendship and patience.

Finally, I would like to thank to my daughter, Bersi, for her love and cheerfulness and to my husband, Tarık, who changed my life, for his patience, love and support that he has given me.

TABLE OF CONTENTS

ABSTRACT	iv
ÖZ.....	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLES	xi
CHAPTERS	
1. INTRODUCTION.....	1
1.1. Background of the Study	1
1.2. Scope of the Study	3
1.3. Research Questions	4
1.4. Definition of Terms.....	5
1.5. Structure of the thesis.....	7
2. DESIGN IN LOW-TECH SMALL AND MEDIUM SCALE INDUSTRIES.....	8
2.1. Introduction.....	8
2.2. Design and Design Culture in Low-tech Small and Medium Scale Industries	9
2.2.1. Design as a strategic tool for small and medium scale companies.....	13
2.2.2. Types of the design resources	15
2.2.3. The ways of incorporation of design into companies	17
2.3. Organizational structures and management strategies as determinants in product development process and design	22
2.4. Product Development Processes in Low-tech small and medium scale industries and Design as a Strategy.	27
2.4.1. The types of new product development.....	30
2.5. Organizational culture perspective and consumption of design expertise in low-tech small and medium scale industries	33
2.5.1. Firm as a field	37
2.6. Design and its incorporation into the furniture industry in Turkey	40

3. METHODOLOGY	43
3.1. Introduction	43
3.2. Research Methodology	43
3.2.1. In-depth Interview method	44
3.2.2. Narrative Analysis	45
3.3. Designation of the interviews:.....	46
3.4. Sampling method.....	48
3.5. Data collection and analysis	50
3.6. Limitations of the study.....	51
4. CASE STUDY.....	52
4.1. Introduction	52
4.2. Case Summaries	52
4.2.1. Company A:	53
4.2.2. Company B	54
4.2.3. Company C.....	55
4.2.4. Company D.....	57
4.2.5. Company E	58
4.2.6. Company F	60
4.2.7. Company G.....	61
4.2.8. Company H.....	62
5. COMPANIES AS SOCIAL FIELD WHERE DESIGN OCCUR.....	64
5.1. Introduction	64
5.2. Impacts of the companies' structures and management strategies on design and its position within the new product development processes	64
5.2.1. Professionalization in the companies	66
5.2.2. Organizational structures and cultures of the companies	71
5.2.3. Management strategies and their reflections on new product development processes and design	79
5.3. Discussion	95

6. CONCLUSION.....	97
6.1. Position of design and the designer	100
6.2. The key actors who participate to design practice in new product development process.....	103
6.3. Habitus of the owners as the determinant of the differences between positions of design and the designer	106
6.4. Recommendations for further studies.....	111
REFERENCES	112
APPENDICES	
A.....	118
B.....	121
C.....	124
D.....	125

LIST OF FIGURES

Figure.2.1. Theoretical framework in relation with the determinants of position of design and the designer.....	8
Figure.2.2. Shifts of emphasis in industrial activities (After Heskett, 1998).....	10
Figure.2.3. Domains of Design Culture (Julier, 2000).....	12
Figure.2.4. Attributes of design (Trueman, 1998).....	21
Figure.2.5. Elements of organization (Boddy, 2005).....	22
Figure.2.6. Relationship between strategies and structural models in organizations (Boddy, 2005).....	26
Figure.3.1. Employed methodology for the case study.....	44
Figure.3.2. Purposeful sampling method.....	49
Figure.6.1 Firm as a field and the actors as position takers.....	99
Figure.6.2 Furniture production field and firm as position taker.....	100

LIST OF TABLES

Table.3.1	Description of the samples.....	50
Table.4.1.	Managements and changing scope of activities of the cases	52
Table.5.1.	Types of ownership, age and use of design in the companies.....	65
Table.5.2.	The actors in key positions in the companies	66
Table.5.3.	Organizational structures, management strategies and their reflections on new product development processes and design	71
Table.5.4.	The most effective actors in the phases of development processes	95
Table.6.1.	The companies design strategies and key actors in design process	105

CHAPTER 1

INTRODUCTION

1.1. Background of the Study

In both developed and developing countries, the place of design process as well as the position of the designer against the other professions have changed dramatically in line with the changes in both the technology and the production techniques. In recent years, technological innovations, which in some respects reach beyond imagination, have changed the dynamics of industries. Although high-tech industries and their locations usually determine the dynamics of development, the effects of industrialization are not only classified by level of technology. In certain cases, the low-tech and labor intensive industries competing in international markets are as effective as the high-tech industries. The strength of some low-tech and labor-intensive industries do not result from their heavy investment in technology or science, but from their ability to adopt more flexible production systems in which the products and production types can be easily changed so that they can meet the new expectations of the consumers which are constantly changing.

Competition depends on mostly innovation in both high and low-tech industries. According to Bonsiepe (1995), lack or inadequate usage of one of science, technology and design prevents the innovation and development in industry. Actually in low-tech and labor intensive industries which are mostly cultural product industries (Scott, 2000), science and technology are the far reach tools for competition and main point of strength of competition has its source in design.

In Turkey, although rapid developments in industry have been experienced, the level of industrialization is far away from the levels of developed countries because of lack of both financial resources and national and institutional policies

which can underpin the effective usage of the science, technology and design. Under these conditions, small scale and low-tech industries have gathered more importance in the national economy in Turkey.

One of the most prominent low-tech small and medium scale industries in Turkey is furniture industry. In the 9th Development Plan of State Planning Organization (SPO), it was stated that the furniture industry in Turkey has experienced rapid growth and its share in Gross Domestic Product is around %3. There are 29.346 furniture production firms in Turkey and approximately 99% of these firms are small and medium sized. Increasing competition and technological improvements have created relatively tough conditions for them. In recent years, various large scale and transnational companies like IKEA have entered into the market and challenged the market share of local firms. The ubiquity of transnational brands and its effects are turned into a threat on local industries as stated by Malmberg (1997), because of these effects, advantages of being local such as low transportation costs are turned into ineffective factors. Now, the local firms have to find new weapons for competition. Some firms have successfully adopted themselves to these new conditions and maintained or improved their market positions by deploying new weapons whereas many firms, which are mostly traditional, have failed to meet the challenges of the competitive market conditions.

In the related literature, it may be observed that the advantages for competition are not only based on price and quality but also based on distinctiveness of a product. In line with this reasoning, Leslie and Reimer stated (2006) that heightened competition makes design an important tool for enhancing the competitiveness of an industry. Parallel to this understanding, even in certain regions in underdeveloped or developing countries, design has been used as a key tool for regional development with the active support of the state (Stein, 1999).

Although there are some newly initiated design intensive projects supported actively by the government, in the prevalent structure of small and medium scale furniture industry in Turkey, most of the firms are reluctant to innovation and

novelty and tend to produce tested products derived or inspired from the product range of some other successful firms (Er and Çırpanlı, 2004). In first glance, it seems like this results from economic limitations of firms, as especially some traditional firms, which are not institutionalized and managed by their non-professional owners, which do not have chance to take risks of newly designed and untested products: However the problem is not so simple; there are also some cultural factors which constitute a barrier to the possible solutions. These cultural factors penetrate into three main domains of design process in small scale furniture industry. In Guy Julier's (2000) analysis of design process, he identified these three main domains as design, production and consumption. According to Julier, design process actualizes through interactions of the domains and their actors.

Necessity of innovative and distinguishing design-led policies has already arisen for improving the Turkish low-tech small and medium scale furniture industry's position in the face of recent developments. However such improvement requires analyzing the design process in these firms and the wider cultural field in which the design process emerges.

Within this perspective, the goal of this thesis is to identify the position of the design process and designer within the product development process in small scale furniture industry in Turkey with reference to cultural factors creating differences in the approaches of the firms towards the design process and the designer.

1.2. Scope of the Study

The development of design profession and its integration into industries are shaped by the policies or lack of policies in this area. In establishing an effectual policy framework, there is a need for systematic information which is lacking at the moment. Such a data and information would also explain various dimensions including the state of existing perceptions of design activity and designer in industry. Therefore the aim of the thesis is to contribute to the formation of

effective policies by exploring the present ways of practicing and resulting perceptions of the design process and the designer in small scale furniture industry in Turkey and by also providing systematic information and data regarding this issue.

1.3. Research Questions

In order to explore the present way of practicing and resulting perceptions of the design process and the designer in low-tech small and medium scale furniture industry five research questions are raised.

I.What kind of strategies do the low-tech small and medium scale furniture producers have for surviving in recent conditions? How do they use the design as a strategy?

II.What kind of new product development policies exist in low-tech small and medium scale furniture industry in Turkey?

III.What is the position of the designer and design process within the new product development process of low-tech small and medium scale furniture industry in Turkey?

IV.How do the actors of production domain of the low-tech small and medium scale furniture industry perceive the design process and designer?

V.How and to what extend do cultural backgrounds and long term production experiences of the actors of the domain affect the design process and its perception?

1.4. Definition of Terms

Low-tech small and medium scale industries:

Different kinds of definitions exist related to the small and medium scale industries in the related literature. However, most of these definitions are based on Bolton Committee's (1971) formulation of small enterprises. Although there is no possibility to obtain the Bolton Committee Report, Storey (1994) discusses and analyzes the definitions in his book. Bolton Report formulated small scale enterprises based on economic criteria;

- They should have small share in the market,
- They should be managed by the owner or one of the partners,
- They should be independent,

Besides Bolton Report formulation, in order to determine which companies should be regarded as small and medium scale, the number of employees and turnovers of the companies are also taken into account. In the small and medium scale enterprise definition of European Commission the companies which employ fewer than 250 employees and which have an annual turnover fewer than EUR 50 million are regarded as small and medium scale.

In Turkey, KOSGEB (2007), Small and Medium Scale Industry Development Organization, is a semi governmental institution which has been established in order to enhance strength of competition, sustainability and productivity of small and medium scale companies by providing support programs. In the establishment law of KOSGEB (1990), small and medium scale enterprises are defined as the establishments which have less than 150 employees. However in the strategic plan 2008-2011 of KOSGEB, it is seen that the companies which have 50-250 employees are also supported by KOSGEB.

Since to learn companies' annual turnover will be difficult, number of the employees and Bolton Reports criteria are used as the determination of small and medium sized industries. However, small and medium scale industries differ according to their technology level. For low-tech small and medium scale

industries, Scott suggests some criteria. They are mostly mature industries such as food, furniture, publishing and footwear industries. Investment on technology and R&D is in low level and their production techniques are traditional and craft based.

New product development process:

New product development process is a key activity for competing in any industry. In the related literature, scholars and professionals from various disciplines from management to engineering are focusing on it in order to manage it more effectively.

The new product development can be described basically as a process which contains all preparation stages of a product or a service from idea generation to launch. However, according to the scholars it is more sophisticated process than its basic descriptions. Bruce and Biemans (1995) focused on its transformative nature, in their definition, it is the product development process through which technical ideas or market needs and opportunities are turned into a new or modified product. The actors and their effects are one of the most important factors which can change all consequences throughout this transformation activity. In the present thesis, the main emphasis is placed on the actors of new product development process, especially on the owners because of their effects on it.

Socio-cultural factors:

Human life is shaped via socio-cultural factors such as shared histories, memories, myths, customs, sentiments, values. These factors also shape human's practical knowledge, ways of coping with, interpreting, struggling with the world (Stoer and Rodriguez, 2005). Socio-cultural factors also determine how people act in a process, how they communicate and affect each other and their practices. It is also important to note that actors interpret the economic processes such as developing a new product within a cultural framework. Although the process of globalization seems to be undermining such cultural differences, most scholars agree that cultural frameworks and meaning systems are still important.

Therefore we have to take such cultural factors and features of a particular society, community or individual into account.

1.5. Structure of the thesis

The thesis is organized in five chapters. In the first chapter background of the thesis is described, the research questions are stated and key terms are defined.

In Chapter 2, relevant literature is reviewed in three parts. Firstly, in design related literature, evolution of design, especially of industrial design, design culture concept and position of design and the designer in product development process in small and medium scale industries are analyzed. Secondly, in management and organizational theory related literature, organizational structure, organizational culture and their effects on management and the processes in the companies are investigated. In third and final part of literature review, Bourdieu's field theory and habitus concept are presented.

In Chapter 3, In-depth interview and narrative analysis based methodology is described. After description of the methodology, formulation of the interview questions, selection of the cases and pilot study are explained.

In Chapter 4, case summaries of the eight interviewed companies are provided in order to form a base for the evaluations. These summaries contain information such as their scopes of activity, historical evolutions, organization structure etc.

In Chapter 5, the findings acquired through the in-depth interviews conducted with the owners and product development stories narrated by the owners, the designers and the heads of production departments are classified and presented based on the theoretical framework.

In Chapter 6, the findings derived from the cases and literature review are discussed. Besides the conclusions this chapter also contains suggestions for further research studies.

CHAPTER 2

DESIGN IN LOW-TECH SMALL AND MEDIUM SCALE INDUSTRIES

2.1. Introduction

Design is an activity which has a wide scope from buildings to clothes. It is a reflexive activity in human history as well as in manufacturing. While the transformation of the artifact and services affect the course of life, this transformation and its perception are also changed by changing life styles. This kind of reflexive transformation occurs also in the production field. While the changing role and position of design and the designer affect the production field and its actors, the transformation of the field and its actors affect role and position of design and the designer.

In this chapter, these reflexive transformations are traced through a literature review built upon design, organizational theory and Bourdieu's field and habitus theory (figure 2.1.).

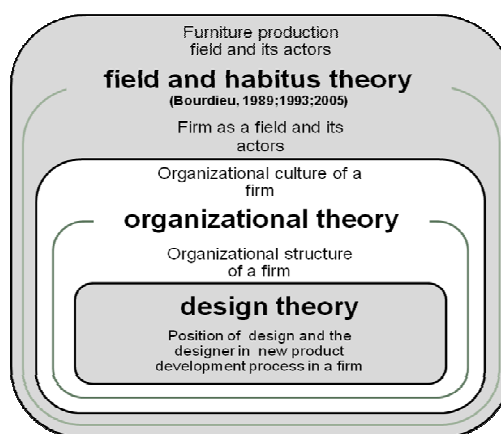


Figure.2.1.Theoretical framework in relation with the determinants of position of design and the designer

2.2. Design and Design Culture in Low-tech Small and Medium Scale Industries

Along with changes in the social, economic and cultural contexts, boundaries and scope of design have expanded. Many academics and theorists attempt to explain and analyze these changes and the expansion of its scope. Heskett, as a scholar who studied on design, (1998) explains these changes with reference to “a move away from the main focus of twentieth-century industrial and commercial activity which was dominated by the concept of mass by referring to mass-production, mass-media, mass-advertising, mass-opinion, and mass consumption” (1998, 79). From a different perspective but similar to Heskett’s argument, Scott (2000) suggests that there is a shift from Fordist production systems to post-Fordist production which is argued by many other scholars besides him. The shift in Scott’s argument is based on changing consumer tastes and demands throughout the advanced capitalist economies. It is the new consumers’ demand for design and information-intensive products which triggered an assortment of craft, fashion and cultural product industries. While the consumers of the Fordist era applauded the functionalist and minimalist but also **standardized** aesthetic of high modernism, it has been the **distinctiveness** of a product which persuaded the Post-Fordist consumer. Besides changing consumer tastes and demands, developments in production techniques and organizations also trigger flexible production which allowed customizable distinctive products.

While the argument of shift from mass to flexible production is strengthened, according to Scott by “*the increasingly differentiated and fragmented consumer culture*” (2000; 6) which causes changes in consumer tastes and demands, Heskett founded his argument on the shifts of emphasis in industrial activities summarized in the following figure.

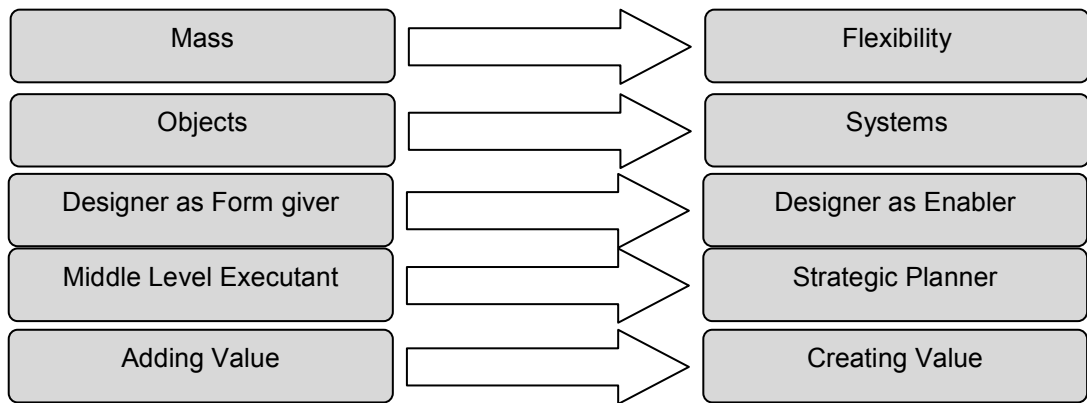


Figure.2.2.Shifts of emphasis in industrial activities (After Heskett, 1998)

In addition to the crisis of Fordist production, changing consumer tastes and demands mentioned above played part in the shift from Fordist production to flexible production. Along with tastes and demands, the changes in production techniques and organizations altered the function of design. Main focus of design was mostly on objects, their functions and costs in Fordist production systems but in post-Fordist era, scope of design is extended from products to systems in which the products are produced or systems of needs “as a force of consumption” (Baudrillard, 1988, 42). This extension of scope of design function affects consequently the role of the designer. In mass production systems, tasks of a designer depended on design function which was focused on only product, they were mostly restricted within the visual aspects of the products (Perks, Cooper and Jones, 2005). However in post-Fordist production system, because of expanded design functions from products to systems, designers are positioned strategically as managers or team leaders in high-tech and large scale companies. (Valtonen, 2005) Shift from object to systems also had an effect on value, in post-Fordist systems; value of a product or a service is not only determined by its concrete features or brand to which it belongs but also by “experiences from concept to retail” (Valtonen, 2005, 7) for consumers. Experiences are offered to consumers throughout the consumption phase of a product which start from the moment when a potential consumer meets the products or feels the need for it and may continue after its disposal.

The shift concept is also mentioned by Julier (2006). He points out that there is a shift in the role of design, design has a central role in creating and articulating value but his definition of the shift in the role of design is not limited within value, it has also a central role, which can be associated with Heskett's shift from objects to systems, in structuring the circulation of information and forming the everyday practices. Each object or system which takes part in the human life bears information and affects all practices through their functions, values, meanings and connotations whether in an intentional way or not consequently, it is the designers who affect the course of life as a complex system.

The shifts are not the only issues that should be analyzed in order to understand the evolution of design from a function to a strategic tool for competition. Besides these shifts there are numerous factors that should be taken into account to understand the changes in design and the design process. Julier (2000) and Margolin (2002) discuss design with reference to design culture concept which contains factors which affect the design process. While Julier's design culture concept embraces a complex matrix of human activities, perceptions and articulations, he argues that to provide routes into this complexity, its visual, material, spatial and textual manifestations should be analyzed. Parallel to Julier's argument, in his book *The Politics of the Artificial*, Margolin (2002) states that, design should be recognized as a practice within culture, and adds that "the study of design as culture seeks an understanding of design practice in wider social field where it occurs" (2002, 251).

If design is a process which is shaped by the human activities and in the social field, it should be analyzed in relation to its social and spatial context. In the present analysis, the role of design and the designer in low-tech small and medium scale industries is explored within this perspective parallel to many other analysts and scholars from many other disciplines as well as from design.

Julier's (2000) conception of design process is built upon its three main domains, designer, production and consumption and the interaction between these domains and their actors (Figure.2.3.). Actually these interactions are not isolated realities

but parts of ‘the social field where design occurs’ and objects, spaces, images and systems are developed in the intersection of these three domains.

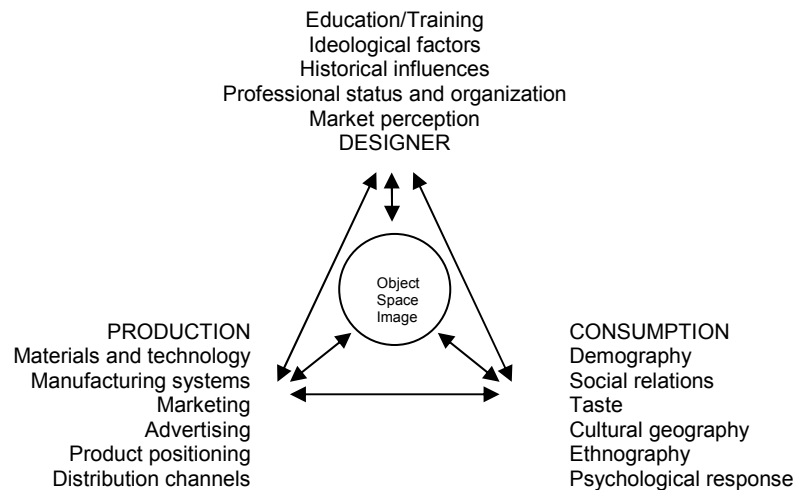


Figure.2.3.Domains of Design Culture (Julier, 2000)

Julier continues to discuss the design process by relating it to design culture concept and states that “the emergence of **design culture** goes hand-in hand with the massification of design production and consumption in the late-twentieth and early twenty-first centuries” (2006, 72). He states that the massification of the production and consumption of design started in 1980’s in industrialized countries such as United Kingdom and it has turned into a sector effective in the economies of the European countries throughout the last two decades. Nevertheless, in his argument, the emergence of design culture concept results not only from a quantitative massification, but also from “a qualitative change in terms of how design is practiced, circulated, and perceived” (Julier, 2006, 72).

One result of this qualitative change is that design is not only used for the forms or technical features of artifacts, but also for the self-presentation ways of the systems. In another word, design is positioned not only for creating interfaces for goods but also for creating interfaces for systems.

2.2.1. Design as a strategic tool for small and medium scale companies

The massification of production and consumption of design, which is mentioned above, and the qualitative change in design practice and concept trigger the emergence of consciousness of design as a strategy for development or surviving both for companies and countries. Design theorists and academics have already directed their attentions towards this approach. The analyses place an emphasis on the questions such as, how could design be deployed? How could it be positioned? How could it be incorporated? The lists of the questions related to the design strategies could be expanded but the most important questions are related to position, incorporation and usage of design.

As in all of the human practices, design and its deployment are closely related to the actors who act in the circuit of design. The most dominant actors which affect the position, incorporation and usage of design are designers, producers and consumers. The designers, the consumers and their mutual interactions are the most analyzed subjects in the literature but the analyses on the mutual interaction of the designers and producers are very limited. Some existing analyses are related to large scale or high-tech companies which have already positioned, incorporated or which use design as a strategy for global competition. However compared to the number of large scale companies, the numbers of the small or medium scale companies are very high in developing countries and especially in Turkey as well as in Latin America. According to OECD (Organization for Economic Co-operation and Development) (2004), total number of the Small and Medium scale manufacturing companies in Turkey is around 210 000 and their share in total manufacturing companies is %99.6. So the analyses focusing on strategic design in small and medium scale companies become highly important and we need to pay some attention to the design processes in the companies in this scale.

Although small and medium scale industries contain both low-tech and high-tech industries, in the case of furniture industry, small and medium scale companies are mostly low-tech industries. Because of the nature of furniture production, the

degree of the modernization of the machines in any furniture factory, with the exception of some extreme examples, does not make much difference on the level of technology. Furniture industry is a craft based and labor intensive sector and there are hardly any resources devoted to research and development like other low-tech industries (Schienstock and Hämäläinen, 2001). Hence, in this present analysis, small and medium scale companies which produce furniture are regarded as low-tech industrial establishments.

In high-tech industries, the distinctive characters which make a product preferable is provided by technology, science and engineering shortly by research and development. In recent years the most important asset is the knowledge which is gathered throughout the research and development process in industry.

On the contrary, in furniture industry, the distinctive character is achieved largely by design and therefore the design action within the companies is regarded as an asset which becomes a strategy (Kristensen and Lojacono, 2002). Similar to the knowledge gathered through research and development processes in any industrial field, design is also a kind of knowledge but it could not be completely stored as recorded documents. Design knowledge can be regarded as tacit knowledge related to designers' and other actors' actions, so the effective organization and management of this kind of knowledge is only possible when the managers or responsible staff has the adequate knowledge about design process and its management. If design is the action which is not positioned only for visual aspects of a product, but also positioned for launching a new brand, for establishing company identity etc., management of this asset may be turned into one of the major issues related to competition and stability for low-tech small and medium scale industries.

2.2.2. Types of the design resources

.....“Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life cycles.

...

Therefore, the term designer refers to an individual who practices an intellectual profession, and not simply a trade or a service for enterprises.”(ICSID, 2009)

Contrary to design definition of ICSID, the most common perception of design and the designer within low-tech small and medium scale industries is related to only visual aspects of the products, and design is excluded from the other functions of product development for instance technical aspects are assigned to only engineering or R&D units, launch is assigned to only marketing departments, etc. (Hertenstein et al., 2005). The types of the design expertise positioned within the companies differ as a result of companies’ understanding of design and what they expect from the design process. In the literature, three main types of design expertise are identified (Bruce and Morris, 1995). These types are;

- In-house design expertise; designer is positioned within the firm mostly as full time staff.
- Outsourced design expertise; design professionals are commissioned out of the company whether for a short term special product development or long term consultancy.
- Mixture of in-house and outsourced design expertise: Besides the in-house design professional that is aware of the company’s capacity and practices, an outsourced design expert is commissioned in order to provide fresh inputs.

The position and the role of in-house and external designers within the structure are dependent on the design understanding of the companies. In-house design expertise is preferred for controlling the information and knowledge within the company in high-tech industries (Jarvinen and Koskinen, 2001) in which the

knowledge is the most strategic asset for the companies. The most negative aspect of employing in-house designer is that they are so involved in internal limitations and intra-company matters that they fail to design innovative and challenging products (Bruce and Morris, 1995). As a result of this negative aspect, mostly the typical and routine tasks are allocated to internal design resources in combination of in-house and outsourced design expertise. The most common reason for commissioning external design expert is to acquire challenging designs which may not be obtained from an in-house design expert whose creativity is limited by internal issues such as available sources or techniques. In some cases there may be no need to employ a full time design expert, the cost of outsourced design expertise that the companies call in whenever they need may be less than internal full time expert.

No matter what kind of design resource the companies prefer, the most important issue is its organization and management and the most critical question is “how do the companies manage design expertise?” The management of external design resource in developed high-tech or large scale companies is executed by design managers but in low-tech small and medium scale industries, it is mostly executed by the owners or other managers who are employed for another task (Roy and Potter, 1990). This kind of design management in low-tech small and medium scale industries results from the lack of sources and it may cause some unsuccessful outcomes because of insufficient skills for managing design process (Ekberg, 2005; Von Stamm, 1998). Very limited responsibilities and poor relations with other functions such as marketing and production cause low quality design expertise. The other critical problem is the designers’ insufficient knowledge about the companies’ practices and structure. So the companies should inform adequately both the internal and the external designer about the company, its market orientation, sources etc., in order to prevent this failure.

The design managers and design related personnel have to have communication skills as well as designers. Ekberg’s (2005) analysis of design investment in wood industries suggest that the long term relationships with design experts construct the knowledge for each side and can contribute more effective design solutions.

Although, in the literature, there is an emphasis mostly on these three kinds, it is silent design which takes place in some cases. 'Silent design' (Walsh et. al., 1992) is executed by other experts who have been employed for different tasks but undertake some works in relation to the designers' tasks such as aesthetics or ergonomics of the products. Silent design exists before the professional designer is positioned within the companies or when the resources are limited to employ an in-house designer or to consult an external designer. In some cases, 'silent design' is preferred because of the owner's or manager's tendencies. Although the company has a stable position within the industry and sufficient economic capital to employ a professional designer, they continue to rely on silent design.

2.2.3. The ways of incorporation of design into companies

Every manufacturing company has different identity, culture and habits; their location, management staff, relation with others such as retailers, suppliers and collaborators vary. So, the ways of incorporation of design into companies vary according to them. One of the most important factors which affect the ambitions of the companies to incorporate design into their structures is to be in spatial proximity or to be in relation to the companies which use design as a strategy and benefit from design because it is one of the ways of becoming design conscious (Malmberg, 1997). The design management skills, design related competencies and experiences of the managers affect the success of the incorporation of design into the companies. In most low-tech small and medium scale industries, the incorporation of design into the company structure and product development process depends on the owners who have to manage some processes because of the limited resources (Ekberg, 2005). In such cases the incorporation of design into the company depends on the knowledge, attitudes and skills of an individual.

Bryson and Rusten (2005) define seven ways in which firms incorporate design into their production activities and they also state that these distinctive ways can be integrated into the different stages or parts of product development processes. Their explanation of the seven ways in which design is integrated into the value chain is also supported by the examples.

1. Design-product strategy; the product development stages are initiated by design and it is the central element of the product's value chain for the product, as in case of Voss bottled mineral water. In this case; first the designers decided to bottle Norwegian water for high class hotels and restaurants. Then a resource of water is discovered and a name is chosen for the bottled water.
2. Product-driven strategy; the company develops a new product which is distinct from but in some way related to its existing famous products. Stokke is taken as an example for product-driven strategies; it is a famous company for their Tripp Trapp chair which can be used as high chair for children or a normal chair for adults. The company decided to produce an urban pushchair which requires a different kind of production system. The pushchair has innovative features like Tripp Trapp chair such as being higher than usual pushchair for removing children from the car exhausts and providing better visibility. Then the managers of the company decided to sell furniture business because designing and developing products for children is turned into main business for the company.
3. Process-driven strategy; a firm develops a product which is designed for maximizing the benefits of its production system. Although in Bryson's and Rusten's analysis, they emphasize high-tech production systems for this kind of strategies, it can also be used for middle level technological equipments. Because the most important factor is the design of product's compatibility with the production system whether high-tech or not. Their case for the process-driven strategies is Ekornes Stressless which produces high-tech and customizable furniture, The Company's production system is based on robotic-high technology. The product development process is conducted by the in-house design team which has all the information about the company's production system.
4. Fashion-driven strategy; the product development stages are conducted in order to design fashion-rich products which is exclusive and in some cases

available only in special locations. Bryson and Rusten used perfume as an example because of its packaging, brand and retail experience which are more important than its other features.

5. Consumer-driven design strategy; the products are developed for individuals or firms. They are customized designs in accordance with the orders of the customers. Some examples are the design and manufacture of ships, contract furniture and interior designs.
6. Politically motivated design strategy; the products designed or developed in accordance with some government regulations for instance for sustainability, environmental issues. Another example is universally designed products which meet needs of particular groups.
7. Business identity motivated strategy; a company develops products to support its corporate identity by establishing a visually recognizable look across a product range for example Apple. Their iMac computer and iPod music player designed in order to differentiate products of the company from its competitors.

These seven strategies are determined by classifying the motivations which differ from company to company because the structures of the companies, attitudes of the actors and other factors which affect the context are different from each other (O'Shea, 1999). Hence the integration of design into the companies demonstrates different characteristics because of the distinct motivations of each company.

Heskett's design's strategic functions (Heskett, 1998) can be recognized as components of the motivations for incorporating design into the companies. These functions also can be evaluated as the basics which can be turned into advantages for competition. Either all or some of them can constitute the motivations for integration of design into the companies.

Design's Strategic Functions (Heskett, 1998)

- Generating new product concepts
- Consumer focus
- Speed to market
- Ease of manufacture
- Reducing product costs
- Reducing process costs
- Differentiating products
- Adding value to products
- Extending product life cycles
- Innovation, opening new markets

Besides design strategic functions, there are also design attributes which should be taken into account in analyzing the incorporation of design into companies. Like a product which is preferred for its attributes and sign values, design function and design expertise are positioned in the structures of the companies according to their attributes. In order to determine "key attributes of design in the context of product development" (Trueman, 1998), many research were conducted one of them was realized in Bradford University. The following list provides the taxonomy of design attributes which were obtained from this research and interpreted and classified under four titles by Trueman (1998) as demonstrated in Figure.2.3.

The design attributes defined by Trueman may correspond to Heskett's 'strategic functions of design'. Whether it is named as strategic functions or attributes both of the classifications imply the expectations from the design function and the designer.

Table 1 Attributes grouped according to VIPP typology

Design attributes	Focus at product level	Focus at corporate level
<i>Value (starting point)</i>		
Product styling	Product styling	1. Corporate culture and identity (Total design commitment at all levels) Develop a culture of design standards and quality that pervades the company Adds perceived Value to products and customer confidence in company (<i>Image</i>). (ref. Dumas and Mintzberg, 1995 "Infuse" Level)
Aesthetics	Aesthetics	
Quality	Quality	
Standards	Standards	
Added Value	Added value	
<i>Image (reinforces value)</i>		
Product differentiation	Product differentiation	2. Strategic activity (Top level design commitment) Build design attributes into corporate strategy Examine where and how design can enhance current and future company <i>Image</i> and strategy (ref. Lorenz, 1995.80, "Strategic Design")
Product diversification	Product diversification	
Product identity	Product identity	
Brand creation	Brand creation (Corporate identity)	
Corporate identity	(Corporate culture)	
Corporate culture		
<i>Process</i>		
Update products	Generate new ideas	3. Fulcrum for new projects (Full design focus at project level) Use design as a fulcrum for new product development. Design not only shapes and directs new products but also interprets, integrates and communicates new ideas at each stage of the development <i>Process</i> (ref. Lorenz, 1995 "Design Policy")
Generate new ideas	Idea communication	
Communicate ideas	Interpret ideas	
Interpret ideas	Integrate ideas	
Integrate ideas	Promote products	
Interface (between managers, project team, production, customers)		
Promote, advertise products		
<i>Production</i>		
Reduce complexity	Reduce complexity	4. Strategic tool (Some commitment at product level) Design as a tool in new product development. Where and how design attributes can be used to improve the <i>Process</i> and <i>Production</i> of new products, may facilitate teamwork (ref. Lorenz, 1995 "Design policy")
Reduce production costs	Use new technology and materials	
Reduce production time	Reduce production time	5. Limited use (Small commitment at product level) Design attributes used in very limited way in <i>Process</i> and/or <i>Production</i> of new products (ref. Lorenz, 1995 "Shallow design")
Use new technology		
Use new materials		
Recycle products and materials		

Figure.2.4.Attributes of design (Trueman, 1998)

The decisions about which integration strategies to be preferred or which design functions to be employed are taken according to the design perception and approaches of the management. Design process differs from industry to industry, from company to company, from culture to culture. The tendencies for design strategies, positioning design and the designer within the company structure and knowledge about design or design knowledge are determinants of the product development process. These determinants affect the product development process from motivations of the actors to consequences of the process. Therefore

success of a product is affected by all functions and actors of its development process. However, in some cases, the most effective actors are the managers. Furthermore, in some cases, even if the intended outcomes are not obtained, the unexpected consequences can be turned into a success by convenient management strategies as in post-it case. 3M researchers tried to develop a strong adhesive however the outcome of the project was disappointing because the outcome was not fulfilling their intention. Nevertheless it was turned into one of the most successful products when it was used in the development and marketing of a totally new product, through management strategies of 3M (Lemelson-MIT Program: celebrating invention and innovation).

2.3. Organizational structures and management strategies as determinants in product development process and design

Organizations are shaped to reach to their objectives determined by the owners/founders or the powerful actors within the firm. In other words, organizational structures are shaped by the most effective actors to make these organizations more effective and efficient.

However organizations consist of not only organizational structures but also organizational cultures. Boddy (2005) suggest that structure and culture are constitutive elements of organization (Figure.2.4.). Although Boddy describes these two elements of organization as unconnected to each other, they should be regarded as the parts which also affect each other (Clegg, Kornberger and Pitsis, 2005).

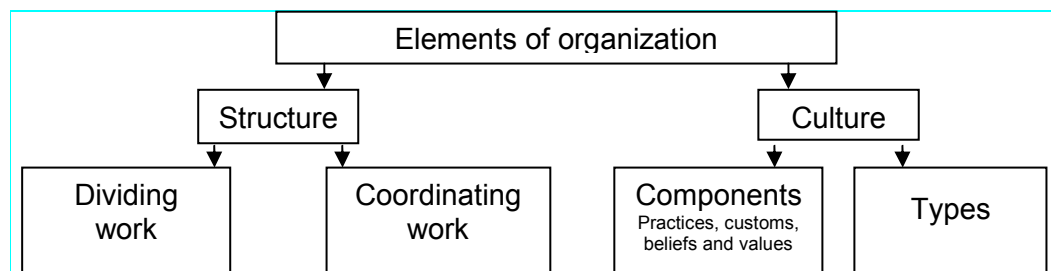


Figure.2.5.Elements of organization (Boddy, 2005)

The most effective actors' objectives and approaches which shape the organizational structure of a company also shape the organizational culture. The models of organizational culture determine how actors perceive an organization and how they behave in it. Quinn et al (2005) describe four types of organizational culture models;

Rational goal models: All duties, positions and functions are clearly defined. The main emphasis is on minimizing cost and maximizing productivity with rational analysis and measurements.

Internal process models: Stability by routines is provided by strict rules and regulations. Duties are assigned based on specialization and expertise. Positions are ranked vertically in hierarchical structure. Rules and procedures determine the decision making process. Management is based on **bureaucratic** management.

Human relations models: Within this model, social processes are the most important factors at work. People participate to the decisions which affect them. Motivation is one of the effective factors in order to provide productivity.

Open systems models; are based on flexibility. They are open to external factors. There is a continual innovation and changing environment. (Boddy, 2005; Clegg, Kornberger and Pitsis, 2005)

Besides Boddy's concept of elements of organization, in the current literature related to management, classifications of the organizational structures vary according to the theorists and researchers. Some of the key determinants for the structural models are size, decision making processes, division of work and contingency perspectives of the organizations (Clegg, Kornberger and Pitsis, 2005). As these aspects are quite central to the present thesis it is necessary to pay some further attention to these issues.

In size based approaches, the structure of smaller organizations are mostly unplanned as a consequence of the limited staff and resources and they require

flexibility in order to cope with management and task problems. In the larger organizations, because of the growth, their activities are complicated and staff number is increased and a formal structure is turned into a necessity for them (Broom, Longnecker and Moore, 1983). However, in the relatively new studies, formal structure is defined as the structure which is documented and informal structure is defined as undocumented relationships (Boddy, 2005; Clegg, Kornberger and Pitsis, 2005).

Organizational structures are also evaluated based on their decision making processes. Within this perspective, organizational structure is distinguished as centralized and decentralized ones. In a centralized organizational structure, all important decisions are taken by top management, in a decentralized organizational structure subunits have the right to make some decisions related to their scope of activities. However size of the organizations may affect this kind of formations (Boddy, 2005). In large scale organizations, top management may not manage to make all decisions and they have to give the right to the sub-units to make some decisions. Consequently, this kind of model of organizational structure may be considered within the size based approach. When centralized and decentralized organizational structures in the literature are compared, which of these strategies are suitable one could be judged on the bases of their objectives and contexts (Regan, Sims and Ghobadian, 2005).

Another evaluation perspective of the organizational structures is the way of division of work.

- In functional structure, the personnel employed in departments are determined according to their skills and professional expertise.
- In divisional structures, the organization divided into separate units which are formed as smaller organizations and serve different target groups. These units have all functions and right to make decisions.
- In matrix structure, both of the functional and divisional structures exist within an organization.

- In team structure, organizations are divided into units similar to divisional structures but within these units there are no hierarchical relationships.
- In network structure, separate organizations work together (Boddy, 2005).

Within the contingency perspective, organizational structures are developed by the managers in order to suit to contingents such as changing environments, technologies, size etc. The contingency perspective is used firstly in 1961 by Burns and Stalker; they defined two models for contingency based organizational structure.

In the mechanistic structure; there is a vertical hierarchy, responsibilities and tasks are defined clearly and decisions are at the top of the hierarchy (Boddy, 2005; Burns and Stalker, 1961). These kinds of organizations are mostly in stable environments (Clegg, Kornberger and Pitsis, 2005). The functional structure (Boddy, 2005) can be regarded as similar to the mechanical structure

In the organic structure; there are not clearly defined tasks and responsibilities, people have initiatives to solve problems and to make decisions (Boddy, 2005). These kinds of organizations are mostly in unstable and dynamic environments (Clegg, Kornberger and Pitsis, 2005). The divisional, matrix, team and network structures can be assumed to be contained in the organic structure.

According to Boddy, although the mechanistic and organic structures were defined in 1961 they are still valid today. However, they exist in a slightly different way from 60's. as a consequence of the shift to more flexible production systems, some organizations may be not fully mechanistic or organic, actually within an organization, there may be both of them according to the contingencies such as uncertainty, interdependence and size which are considered by the management (Boddy, 2005, 371).

When management strategies and organizational structures are considered the culture concept appears again as in design. The actors mentioned above and

their practices, customs, beliefs and values are the main components of the organizational culture (Boddy, 2005).

Companies adopt management strategies according to their organizational culture and cultural components. If the effective actors of a company concentrate on increasing the efficiency and decreasing the cost, cost leadership is the management strategy of this company (Boddy, 2005). Contrary to cost leadership strategy, if innovation is the main focus of a company's management, their management strategy is "differentiation" (Boddy, 2005). While cost leadership strategy requires more mechanistic structural model, differentiation strategy is based on organic structure as shown in Figure.2.6.

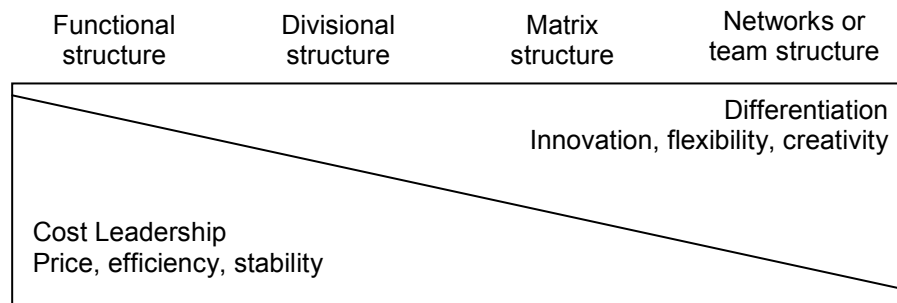


Figure.2.6.Relationship between strategies and structural models in organizations (Boddy, 2005)

Different kinds of structural forms and management strategies may be regarded as one of the explanations of the differences between the low-tech small and medium scale companies and their activities. Consequently, the design process is an activity within the product development process of these companies and there are countless routes for successful products because each company's way of development of a product differs according to the context in which they are in.

2.4. Product Development Processes in Low-tech small and medium scale industries and Design as a Strategy.

Design process and new product development process are subtly different from each other; Moultrie, Clarkson and Propert (2005) emphasize the distinction based on the arguments of Bruce et al. (1998), Otto and Wood (2001) and Nixon (1999). They claim that new product development is a process which emphasizes strategic and managerial issues, but the design process, according to them, is a technical process taking part in new product development process.

Various determinations of the phases of new product development process exist in the related literature. These variations differ according to the scholars and their disciplines. Kotler, a marketing professor, and Roth, a manager in an organization(1984) divide new product development process into eight stages which have additional phases related to marketing and management. In their study, design is mentioned as a sub process of the product development phase.

phases of new product development process (Kotler's and Roth, 1984)

- Idea generation
- Screening
- Concept development and testing
- Marketing strategy
- Business analysis
- Product development
- Market testing
- Commercialization

Within the approach of Perks, Cooper and Jones (2005), the new product development process is divided into five phases in which one of them is design. While Kotler and Roth's classification do not contain design as a phase, Perks, Cooper and Jones determine design as one of the main phases.

Phases of new product development process (Perks, Cooper and Jones, 2005)

- Identification of the need
- Concept development
- Design
- Production
- Launch

These phases and functions which are related to product development processes are fulfilled according to the cultures and habits of the companies.

Although the design process is accepted as a sub-process of the new product development process by some scholars, design is turned into a strategy for competition and the role of design and the designer have widened. In the new product development process, design functions and its role as a strategy vary according to the new product development capabilities of companies.

The roles of design and the designer within the new product development process are classified by many scholars; the classifications of Perks, Cooper and Jones (2005) and of Valtonen (2005) are analyzed within a historical perspective.

The classification of roles of design and the designer (Perks, Cooper and Jones, 2005)

- 1920s to 1950s: Design as Specialized
- 1960s to 1970s: Design as Profession
- 1980s: Design as Brand
- 1990s: Design as Sub-process of New Product Development
- Early 2000: Design as Product Development Process Leader

Although these classifications of the roles of design and the designer in new product development process are classified according to its historical evolution, these different roles may still exist in some of the companies of today.

After the historical classification Perks, Cooper and Jones also made a taxonomy which classifies design according to the skills which the designer should have, motivations which trigger the incorporation of design and the context (social field) in which design is executed.

The taxonomy of the role of design (Perks, Cooper and Jones, 2005)

'Design as functional specialism': In this category, designers' role related only with design, they only receive the brief and carry out sufficient research to inform their own design. The designer should have only the traditional skills such as aesthetics, visualization and technical skills. All important decisions and actions related to other departments are dictated by the other functions such as marketing and manufacturing.

'Design as Part of Multifunctional Team': The all functions of new product development process are accepted as part of a team. It is design the key part in new product development. The designer should have communicating and interfacing skills besides its traditional functions.

'Design as new product development process leader': In this category, design is the supporting and driving force throughout the new product development process. Designers should have management skills besides other skills which are required in former categories. In addition, they also have to undertake the activities which are not related to design such as observation, research and business analysis.

The roles of design which were assigned to the earlier periods such as "design as specialized" and "design as profession" can be associated with "Design as functional specialism" category. It exists in mostly mature industries which are mostly low-tech and craft-based such as textile, shoes manufacturing, furniture, etc. these kind of industries defined by Scott (1996) as cultural product industries. Although most of the companies within these industries try to intensify design content, role of design is still restricted within "design as functional specialism".

2.4.1. The types of new product development

Product development process is determined by innovation capacity of a company. The types of product development differ depending on the external and internal factors, types and level of the knowledge, etc. as in innovation capacity.

Albaladejo and Romijn identify external factors as external staff, suppliers, collaborators, competitors, industry associations etc. The information about technologies and markets can be gathered through the interaction with external factors. Their identification of the internal factors is contain process, organization and internal knowledge etc. they suggest that the internal factors can be enhanced “through internal learning, involving investments in formal R&D, informal experimentation, debugging, making minor adaptations to products, processes and organization, in-house staff training, and so on” (Albaladejo and Romijn, 2000, 5). In their identification of external and internal factors the main emphasis is on the knowledge.

Enhancing knowledge requires time and resources, however, low-tech small and medium scale companies mostly suffer from lack of resources and indirectly suffer from lack of time. In such cases, the professional who brings the knowledge into the company plays key role within product development process. The designer is one the professionals who bring the knowledge. The role determined for design and the designers determine how the knowledge, which affects the product development processes, will be used.

The most prominent types of product development are incremental and radical product developments in the related literature. However the emphasis is on only these two types of product development among the analysts such as Perks, Cooper and Jones (2005), there are some other types of product development mentioned by some scholars such as John (1995) and Plumlee and Little (1998).

The types of product developments (Plumlee and Little, 1998)

- “New to the world” inventions which create a new market;
- Modifications of existing products;
- Existing products introduced to new markets.

Although there are three types of product development which are adopted from the literature, Plumlee and Little (1998) suggest that ‘existing products introduced to new markets’ focus on marketing strategies not on product innovation. Hence, their classification of the types of the product development can be regarded as contain two types similar to the definition of Perks, Cooper and Jones (2005).

The definition of the types of the product development of John (1995) seems wider classification. He adopted the product development types from Cardozo’s analysis (1993) there are four types of product development.

- Radical product development: new product lines
- New style product development: new to the world products
- Routine product development: improvements and revisions
- Extended product development: addition to existing lines

Actually these four types of product development can be simplified into two types which are mentioned by Perks, Cooper and Jones (2005). Radical and new style product development types can be regarded as radical product development and routine and extended product development types can be regarded as incremental product development.

Incremental product development is based on corrections or additions on the existing products. Radical product development is based on breakthrough innovation. Although one or both of them can exist within the companies’ policies, the most common product development type in low-tech small and medium scale industries is incremental product development because of the nature of the industries. In low-tech small and medium scale industries, resulted from their

most prominent characteristics which are defined by Schienstock and Hämäläinen (2001), there is hardly codified knowledge because of inadequate or no investment on research and development. Their products are low-complex and technological opportunities in production process are limited. As a result of these features their products can be easily imitated. Hence low-tech small and medium scale industries have to develop different strategies to survive.

If the types of product development process is considered with reference to the taxonomy of design roles of Perks, Cooper and Jones (2005), it may be seen that the incremental product development is most common for the companies in which the design has a role as functional specialism and the companies in which design has a role as part of multifunctional team or new product development process leader undertake the radical product development processes.

Incorporation of design into the product development processes of the companies differs according to preferred types of product development, external and internal factors which also affect the preference of the companies but there may be some other factors which affect the integration of design.

From Ruston's and Bryson's (2007) perspective, design function is considered as a commodity and the act of incorporating design function and the designer in the product development process are considered as consumption of design. Although, in their analysis, the main emphasis is on the kinds of motivations for and types of incorporation of design into the companies, why do the companies prefer these types of incorporation is a neglected question. Within this approach, companies should be analyzed as if they are individuals who consume according to their tastes, lifestyles and habitus. Companies' lifestyles and habitus can be assumed to be contained in companies' cultures which are described as organizational culture (Boddy, 2005). Within the organizational culture concept; practices, customs, beliefs and values are key determinants, therefore companies' preferences for types of incorporation of design into their product development processes and their motivations for these incorporations should be analyzed as reflections of their identities, lifestyles and their actors' habituses (Bourdieu, 1989), shortly as reflections of their organizational culture.

In the related literature there also exist some other distinct approaches to the types of product development processes like Ruston's and Bryson's. O'Shea is the one who compares incremental and radical product development processes from a different perspective. He states that, by adopting Abernathy's and Utterback's (1978) perspective of innovation, incremental product development acts to develop a system without destroying it, but radical product development seeks to overturn the system. If this kind of comparisons considered in relation to the nature of low-tech small and medium scale industries, it may be concluded that the destructive nature of radical product development may be the reason why low-tech small and medium scale companies seeking to survive prefer commonly incremental product development.

In this context, the types of the strategies of product development should be handled also within the organizational culture perspective and the impacts of the actors who consume design expertise with in an organization.

2.5. Organizational culture perspective and consumption of design expertise in low-tech small and medium scale industries

In the sociological studies, there are various analysis and theories in relation to consumption, society and culture. Realms of everyday life are related to consumption concept in recent years and some studies on society are based on consumption related concepts such as consumer society, consumption culture etc. The most famous study on consumption culture is Don Slater's (1998) Consumer Culture and Modernity. His description of contemporary society emphasizes its materialistic and pecuniary structure. Hence within contemporary society the most important achievements are not related to 'being' but they are related to 'having' (Slater, 1998, 24).

In modern society, namely consumer society, scope of consumption is not restricted within the consumption of goods; it covers services, experiences, some social actions, etc. Anyone can choose anything which is commodified as well as

she or he can afford. These choices are in relation to some preferences with respect to the positions of individuals, organizations or systems.... In order to analyze these preferences, consumers' socio-economic and cultural backgrounds, tastes, lifestyles and habitus should be understood. However, if the preferences of any company are desired to be analyzed, which factors should be understood?

Slater (1998) states that goods, services and experiences are consumed according to the meanings which they bear. These meanings are turned into the markers of social status groups. In any industry, there exist many kinds of hierarchical social positions and relations. To maintain or to reach a higher position, companies prefer some kind of strategies. These strategies can be associated with lifestyles of individual consumers and they are the markers of the companies' existing or desired positions within the industry.

Within Slater's (1998) perspective, every kind of expertise, consultancies, etc. can be handled as the services which can be consumed by the firms in order to mark their existing or desired hierarchical position within the field of furniture production.

The companies' existing or desired hierarchical positions within the field of furniture are related to some strategies as lifestyles which the position taker should have. These are not determined by only the **economic capital** of the companies; but also determined by other kinds of capitals. These are social, cultural and symbolic capitals (Bourdieu, 1989).

Social capital refers to relations with external firms and organizations and actors of these organizations. These relations constitute some networks. The companies within a given network have the right to reach some resources. Trust is the key aspect of these networks and often there is a reciprocal relationship among the members of the network. They support each other by passing information and other kinds of support. In some cases they share the know-how and other information against those outside the network.

Cultural capital consists of knowledge, some special skills, 'educational credentials' (Calhoun, 2003, 295) etc. Cultural capital of a company is the cultural capital of the powerful actors who are positioned within and outside of this organization. With reference to cultural capital, the level of professionalism, the socio-cultural background of the actors in the organization and its consumer group should be analyzed. An industrial designer, for instance, holds a certain kind of cultural or informational capital resulting from formal education in a university and this information further strengthened by her/his experience in the workplace though the design process. They are tacit and codified knowledge which designer gathered throughout his/her education and experience in the workplace. The companies' tacit and codified knowledge mentioned in previous sections are their informational assets which constitute cultural capital of them.

Symbolic capital is the capital accumulated by the actors as the legitimized forms of other kinds of capital not in the form of money or property, but in symbolic form such as authority, status, prestige, reputation, academic degrees. Such symbolic capital can be convertible into the more traditional form of capitals such as the economic one.

Economic, social, cultural and symbolic capitals affect the strategies which companies have and consequently how companies consume the design expertise. However consumption behaviors of any firm can not be understood adequately by referring to only the concept of different forms of capital. Likewise the habitus concept of Bourdieu is one of the most important key concept through which we can understand the social practices including the fields of industrial design and furniture production. Habitus refers to the dispositions of the actors which are result of long term experiences, tastes and this is largely determined by the class background of the actors. Hence it is also adopted in present thesis to understand consumption of design expertise in low-tech small and medium scale furniture industry in Turkey.

What brings together the different forms of capital and habitus together is the concept of field. Field refers to a social arena within which certain struggles take place over specific resources and capitals. Each field has a different logic and

game which differentiates it from the other fields. Therefore a field is a structured system of positions occupied by individuals and institutions with their relevant forms of capital. Positions are relational and stand in relationship of domination, subordination or equivalence to each other depending on the amount of capital they hold. In such a field each actor acts according to his/her position and his/her habitus.

Although the number of low-tech small and medium scale furniture producers in Turkey is relatively very high, their effect on the determination of the rules of competition in the furniture production is very limited. Dominant companies which determine the rules of competition within the furniture production field are mostly large scale and high-tech companies. Hence magnitudes of their economic capital may allow them to get other kinds of capital, such as cultural capital via employing a design team, or perhaps a star designer in order to acquire symbolic capital besides cultural capital. However, the convertibility capacities of capitals could be utilized to some extent, some other factors also should exist in order to make possible to occupy a higher position in the field. One of the most effective factors which “have had led them to that position”¹ (Bourdieu, 1989) in the field of furniture production is the Bourdieu’s habitus.

Bourdieu’s (1989) habitus concept has a dual definition, as it implies both the capacity which is able to produce classifiable practices and works and also the capacity which can classify and evaluate these practices and works. In other words, habitus generates and underpins the practices or works of the individual, “it is embodied in the individual” (Callaghan, 2005, 3). However it is formed and shaped socially as common understandings. Besides their generative capacity, the practice of an individual is appreciated or condemned according to these common understandings. (Callaghan, 2005)

¹ “The producers are led by the logic of competition with other producers and by the specific interests linked to their position in the field of production (and therefore by the habitus which have led them to that position) to produce distinct products which meet the different cultural interests which the consumers owe to their class conditions and position, thereby offering them a real possibility of being satisfied.” (Bourdieu, 1998,231)

Within the field of furniture production, companies mark their positions by their practices which their actors' habitus generates. Their practices are also classified by other individuals and organizations whose classification behaviors depend on their common understandings. Companies' products, production systems, level of professionalism, assets, power in the field, success in both local and international market, etc. affect their position within the furniture production field. Actually, these determinants are the practices generated by the actors' habitus but these practices are not adequate to determine the position of the company. The outer actors also should classify and evaluate these practices so that the company's position is determined. This position determines the company's power of competition and its domination on the rules of competition. In this respect, it could be argued that the furniture production process in firms could be considered as a field within the larger field of furniture industry (the field of outer actors of product development processes in furniture industry). Field perspective is provided by Bourdieu (1989) and in what follows in this section I will apply this perspective to the analysis of furniture industry with particular emphasis on the design process.

2.5.1. Firm as a field

So far we evaluate the position of the firm within the field of furniture industry. It is equally possible to see the firm itself as a field which could be defined as the relational positions which devotes a composition of different forms of capital to each position. Following this reasoning, for instance the owners could be seen as the key actors who hold highest economic capital and therefore occupy the dominant position in the firm (Moingeon and Ramanantsoa, 1997). The owners have their own habitus regarding the key decisions in the firms related both to the larger field of furniture production and the internal practices of the firm involving the design process.

Designer also occupies a position within the firm and what makes her/him special is the degree of cultural capital she/he holds. Her/his cultural (informational) capital results from a formal education, a university degree and from the previous experiences in the design process. Compared to the owner, it is assumed that

her/his cultural capital provides her/him a specific power against the owner and other actors who lack the cultural capital she/he holds. There are other positions within the firms which are influential in the design process. The production engineers and other actors such as finance sections in the firm. They have their own specific form of cultural capital. In this context, a firm is considered to be field constituted by different positions and although a firm is often considered to be a unitary body which involves cooperation of actors in the firm. It is equally true that the firm as a field is characterized by a struggle among the actors occupying different positions within the firms with their different forms of capital. Each actor occupying a position aims to increase its distinctive capital with respect to the other actors.

If we call this struggle as a game (Calhoun, 2003), then it is necessary to emphasize that there are rules of the game which is determined by a long process. Each actor within the game plays the game by taking the rule of the game into consideration. Nevertheless, Calhoun (2003) emphasize that to take the rules is not the only necessity but the sense of the game is also the other necessity for the perception of the game. Those who fail to do so would likely lose some (or in some cases most) of its capital. However, this does not mean that there is no possibility of change in the firms and its design process and strategies. Bourdieu (1993(2)) defines three main strategies in the game played in a field. Some actors often occupy a conservative strategy which tries to conserve the current situation intact as they are also doing well in the game. The second strategy involves the successionist strategy which aims at getting the better position by replacing the other actor(s) already occupying the targeted position. Finally, subversive strategy aims to change the game to a degree and occupy a better position in the new game. Bourdieu (1993(2)) points out that those who follow a subversive strategy are often those who are new comers to the field.

It is necessary to make few points regarding the field and the strategies employed by different actors. Firstly, the actors often seek allies to their strategies to increase the volume of capital they put in the game. Secondly, the strategies of the actors do not only depend on the specific form and combination of capital they own but also the habitus they hold. It is highly unlikely that an actor leave her/his

long term dispositions aside. Thirdly, the strategies the actors employ has to take not only the internal environment of the firm but also the larger environment outside the firm.

In line with this framework, if we concentrate on the position of the designers in the firm, as we mentioned above, the important starting point is that the designer is supposed to be holding a unique cultural capital resulting from its formal education as well as from her/his previous design experience. It is also important to mention that designer also comes to the firm with a specific form of habitus resulting from her/his life long experience which often reflects her/his class background as well.

It would not be wrong to argue that the designer, like other actors in the firm aims to improve her/his position in the firm as a designer. This often depends on the already established game in the firm and the position of the designer within this firm. If the designer's position in the game has been an important one, this gives the newly entering designer a good start. If otherwise, then the designer makes a disadvantaged start. If the former is a case, then the designer would have a considerable autonomy against the other actors, if the latter is the case it is more likely that the designer would have a little autonomy in the firm.

If the designer enjoys greater autonomy then it is more likely that she/he will be part of a conservative strategy. If the designer has a little autonomy, then she/he could follow different strategies. She/he might follow a successionist strategy to improve her/his position. It is less likely for her/him to follow a subversive strategy as she/he has little capital in the firm. In order to follow such a strategy she/he needs to accumulate some amount of capital and this often requires long time. In this process, the dynamics of larger field is also important. For instance, if there is a positive condition in the larger field such as increasing importance of the design and if the owner who is the key decision maker in the firm with his large amount of economic capital are aware of the importance of design, then for the designer it is more easier to follow a successionist or subversive strategy in the firm as she would get the support of the owner to change the firms attitude toward the design process.

From the owner's point of view, the external environment and the situation of the firm are also important. It is a fact that financial strength of the firm is an important factor in the decisions of the owner. For instance, even when the owner is aware of the importance of the design process in the success of the firm, the financial situation of the firm is important to occupy a designer or a design team in the firm. In such cases, owner might decide not to employ a design team and tries to keep its position within the larger field (conservative strategy). On the other hand, owner might take a risk and could follow a successionist strategy to get a better position in the larger field (furniture industry) by employing a designer as a key actor in the firm.

Another point to be mentioned is that the conflicts among the habitus of the designer and the habitus of other actors in the firm including the owner's habitus. It is more likely that class background of the actors and their previous experiences of them will be an important factor on this issue. It is often the case that designer with a university background have a different habitus and taste than the owner and other actors in the firm coming from traditional background. In this case, a conflict is inevitable among them resulting from their different habitus. This would show itself in the design process. Depending on the autonomy the designer is key factor in such situation. If the designer is in a weak position, it is more likely that she/he would try to compromise her/his position and habitus by taking into account the well established habitus in the firm.

2.6. Design and its incorporation into the furniture industry in Turkey

Turkey is one of the developing countries; nevertheless it is mentioned as in the most developed part of the developing countries (Scott, 2006) together with the Eastern Europe. Like the other countries in this category, small and medium scale manufacturing companies' dominance in industry could not be underestimated. However, in spite of its dominance, there exist very limited academic research and literature on small and medium scale industry in design related disciplines, especially in industrial design field.

In the literature related to the industrial design history in Turkey, it is seen that it is the furniture industry which position design firstly in the product development process. Er (1996) suggests that before the 80s, its scope of the activity was limited with in designing and developing furniture for high-income consumer groups. In the early periods of design in furniture industry, architects and craftsmen were employed or commissioned as mentioned by Er (1996).

Emergence of design as an activity which is positioned in the product development process as a strategic tool in furniture industry as in other industries coincided with 90s(Er, 1996). In the early phases of 90s, while the imported products increased in the local market, the local furniture producers began to perceive that they should develop distinct products which could be compete with imported products in international market as well as in local market (Özkaraman Şen, 2006). In a research study conducted by Korkut and Hasdoğan (1997) in 1996 nationally, it is stated that approximately 18% of the industrial designers who responded the survey worked in furniture design at least once. However the number of the industrial designers in that time in Turkey was approximately 1000.

Consequently, although design as a strategic activity in new product development process has a longer history in furniture industry in Turkey than the other industries, positioning design and professional designers could not be turned into a common practice in furniture industry except a few large scale companies. In the same research study conducted by Korkut and Hasdoğan with both the designers and the managers, the lack of design culture and awareness of the companies' managements related to the functions of design appear as the most frequently mentioned problems. These problems can be considered as the common problems in the furniture industry as well as in other industries.

Besides design related literature, there also some interesting studies in other disciplines which their data can be used as the indicator of how the managers in the furniture industry perceive professional design expertise. One of these studies is conducted by Burdurlu (2004), he analyzed the job advertisements of Turkish furniture producers which was published between 1998 and 2002 and classified

them according to the position, experience, etc. in order to find out the employment pattern, selection criteria, etc of Turkish furniture companies. In his study, the findings indicate that only 24 ads related to designer position were published in daily newspapers between 1998 and 2002 and only 5 out of these 24 companies mentioned industrial designer as the required professional for their designer positions. Among these 24 job ads, 6 companies mentioned interior designers, 9 companies mentioned architects as the required professionals. Interestingly, there were also 5 companies which did not mention any profession for the candidates of designer position. From these data it may be concluded that there was not any specific profession preferred mostly by the furniture manufacturing companies for design practice and product development process in Turkish furniture industry.

CHAPTER 3

METHODOLOGY

3.1. Introduction

The aim of this chapter is to describe the research methodology. Research phase of this thesis is based on qualitative research approach. In what follows in this chapter, firstly the methods employed in this study and why these methods were preferred among other qualitative methods are discussed. After the description of the methodology, the formulation of the interview questions and the selection of the cases are explained, finally the process of pilot study and its effects on the design process of the research phase of this thesis are also explained in this chapter.

3.2. Research Methodology

The main emphasis of the research is placed on the actors' perception of design process and the role of the designer within the low-tech small and medium scale furniture industry. Therefore, the focus is placed on the socio-economic and cultural background of the actors and their long term production culture by drawing upon Bourdieu's (1998) perspective on field, habitus and capitals. In order to gather more detailed information about the actors' perception of the design process, the role of the designer and the most active factors which determine these perceptions, in-depth-interview method and narrative analysis are employed as a mixed method as exhibited in Figure.3.1.

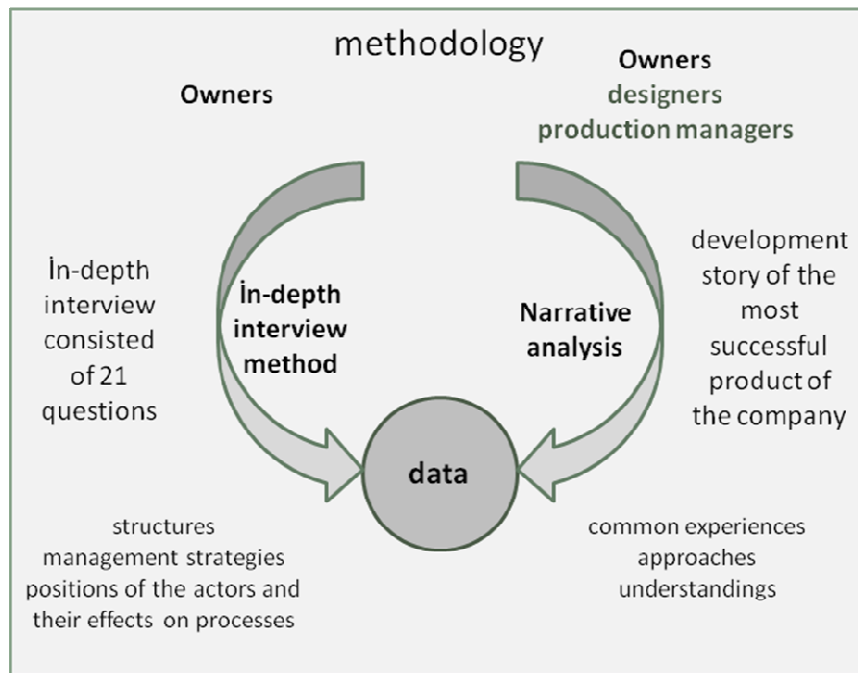


Figure.3.1. Employed methodology for the case study

3.2.1. In-depth Interview method

Although in-depth interview method is described as a conversational method in qualitative research literature, there are some differences between conversation and in-depth interview. In in-depth interview, the interviewer has an active role in the process (Ritchie and Lewis, 2003), but Kvale (1996) emphasizes that the position of the interviewer changes according to type of the knowledge tried to gather, there are two different positions for the interviewers. First, “the miner” interviewer sees the knowledge as ‘given’.

“The interviewer digs nuggets of data or meanings out of a subject’s pure experiences, unpolluted by any leading questions.” (Kvale, 1996)

The second interviewer position is “the traveler”. In this position:

“The meanings of the interviewee’s stories are developed as the traveler interprets them.” (Ritchie and Lewis, 2003)

In the preparation phase of the interviews, the second position which is mentioned by Kvale (1996) is not considered for the interviewer, but during the interviews, the traveler position of the interviewer is applied in the face of the answers given by some of the of the interviewees. Especially in the product story stage of the interviews, the interviewees had to be leaded with some extra questions and interpretations.

The structure of the interviews is based on the approaches of Ritchie and Lewis (2003). They emphasized that there are five key features of 'in-depth' interview.

- In-depth interview is intended to combine structure with flexibility,
- The interview is interactive in nature,
- The researcher uses a range of probes and techniques to achieve depth of answer in terms of penetration, exploration and explanation,
- The interview is generative in the sense that new knowledge or thoughts are likely, at some stage, to be created.

In accordance with these five features of the in-depth interview, the questions are prepared and supported with some explanations and examples. It is the language of the interview questions which is the other important factor. For the language of the questions Jane Elliot's (2006) approach is adopted. Elliot's interview technique approach is based on conversational techniques which are used in everyday life. Hence, everyday language is preferred for the questions.

3.2.2. Narrative Analysis

Although the other qualitative research methods are very effective, they may neglect complex human centered issues as Webster and Mertova (2007) states. The most important contribution of narrative is its ability to analyze human experiences and perceptions. Riesman (2000) emphasizes that stories contain

experiences, social relationships, etc., but analysis of them is a complex matter. Narrative analysis has two dimensional approaches. First is based on the content of the narrative, second is based on unity of narratives (Eliot, 2006). In present thesis first approach is preferred and the stories of the companies are analyzed based on content.

Content based narrative analysis concentrates on the individual narrative. Although Eliot (2006) states that an individual narrative seem like it is related to isolated individual, she adds, it rather reveals the understandings of the social groups, classes and cultures, their structural relationships and habits. Similar elements within the different individual stories mean that there may be common experiences, approaches and understandings. Consequently, to analyze the most effective actor's narratives within the low-tech small scale furniture industry allowed revealing their common perceptions related to design and the designers.

3.3. Designation of the interviews:

Consequently, the interview questions contained both standardized questions and the questions asking the stories of companies and their top products. This approach allows checking the answers of standardized questions about product development processes by comparing them with the stories which mention the usual course of product development. Another advantage of the mixed method is that it prevents the unintended omissions of certain facts about the processes.

In the beginning of the study, the owner, the chief of production and the designer are determined as interviewees for each company. They are the most effective actors in incorporation of design into the product development processes of the company. Because the incorporation of design is determined by these three actors' perception of design as mentioned in the second section of Chapter 2. However in case of the absence of the designer in the company structure, the interview was conducted with the personnel who occupy the position of the designer.

The interviews were structured as two sections (Appendix A). The first section was designed within the narrative analysis perspective. It was decided to ask a) the owner, b) the design team leader and c) the chief of production to choose the top (most successful) product of the company according to their criteria such as success in the market, success in media, ease of production etc., then to tell the development story of the top product of the firm in order to observe the role of different actors and their perception of design within the product development process. The second section was prepared for the owners of the companies and it consisted of 32 interview questions. The standardized questions involved the information about the standardized practices about product development process as well as the information about the company history and the milestones for its development.

After the designation of the interview questions and determination of the companies, a pilot study was conducted with company A and it was seen that some of the questions were actually similar to each other and some of them were not relevant to the main focus of the present thesis. Therefore, 11 of the interview questions were eliminated and the number of them was limited to 21 (Appendix B). Two most important conclusions drawn from the pilot interview with Company A were:

- Answers of some questions were mentioned during the answers of some other questions because of the structure of the questions. In order to prevent repetitions, some questions could be skipped.
- Because of the differences between the actors of the design process and their conditions, there were different ways of answering. Hence to change the order of the questions was needed during the interviews.

As a result of these conclusions, the structure of the interviews was determined as non-scheduled standardized interview method, because this method provides the freedom for probing and rephrasing.

3.4. Sampling method

As the sampling method, “purposeful sampling” method is used. From Patton’s perspective, the researchers who prefer in-depth interview should select her/his cases by purposeful sampling. He states that the selection of the cases which have the information appropriate to the research facilitates to yield in-depth data. In order to gather appropriate data for present thesis, cases were selected among the potentially information-rich (Patton, 2002) companies.

Because of their geographical closeness, the companies were selected from the companies located in Ankara. The number of the furniture producers located in Ankara was determined by Turkish Statistical Institute as 5361 (OAIB, 2006). Because of the large population of the furniture producers located in Ankara, the selection of the cases was limited within the companies which have registered their industrial designs. The data of registered industrial designs between the years 2000-2005 was obtained from Grup Ofis Trademark and Patent Office.

According to the database of industrial design registrations, 497 companies which had registered their furniture as industrial designs existed in Ankara. 6 out of the 497 companies were eliminated because they were large scale producers. The total population of the companies which were low-tech small and medium scale and located in Ankara was 491. The companies which were in corporation with METU Industrial Design Department and which the present researcher was acquainted with were selected among these 491 companies so that building contacts would be easier. Then, fifteen middle scale furniture producers (Table3.1.) were selected among them on the basis of following criteria:

- To have minimum three products registered as industrial design except Company C.
- There should be both first generation and second generation ownerships among the samples.

- There should be different kinds of furniture producers among the samples.
- There should be varieties among the owners' occupational backgrounds.

The first criterion allowed selecting the best possible companies which concentrated on novelty and distinction. The other criteria enabled the varieties among the samples which could allow finding whether there was any difference between the design perceptions of different groups.

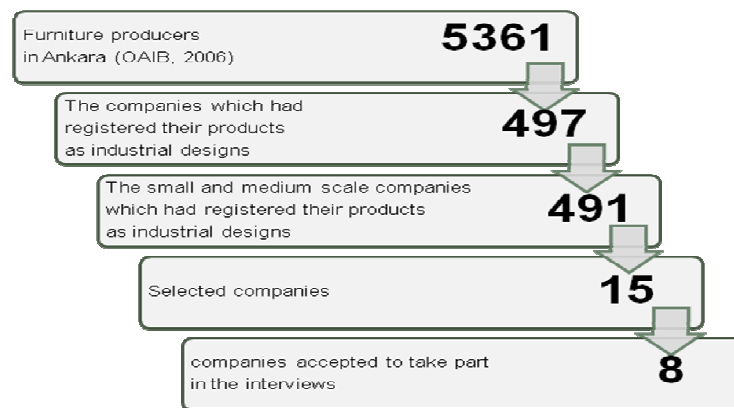


Figure.3.2.Purposeful sampling method

After the selection of the companies, firstly the possible respondents were contacted and a letter (Appendix C) requesting an interview with the owner, the designer and chief of the production of the company was sent via electronic mail. Three out of fifteen companies did not respond to the request, two out of fifteen did not clearly reject but there were no possibility to conduct an interview with them because of the delaying responses. There was also a company which firstly accepted to participate in the research phase but when the interview is started, the interviewee rejected to be recorded by a tape recorder. In order to conduct each interview in same way, this was not realized. Consequently, eight of fifteen companies accepted to take part in the interviews for this thesis.

Table.3.1 Description of the samples

	products	Types of the ownership	occupational background of the present owner	Generation	Age of the company
Company A	modular home and office furniture	Multi-owned	business administrator	1st generation	18
Company B	office furniture	Single-owned	economist	2nd generation	41
Company C	home furniture	Family-owned	woodwork teacher industrial designer	1st and 2nd generation	55
Company D	office furniture	Family-owned	economist	2nd generation	50
Company E	home furniture	Family-owned	carpenter	1st generation	27
Company F	home furniture	Multi-owned	business administrator	2nd generation	5
Company G	home furniture	Family-owned	carpenter	1st generation	29
Company H	home furniture	Single-owned	business administrator	1st generation	17

3.5. Data collection and analysis

During the data collection process, the arrangements of the interviews were the most difficult aspect of the research phase because of the schedules of the owners and the other interviewees. Therefore the interviews were conducted according to the schedules of the interviewees and they were completed within four months. Besides interviews, the additional information relevant to the companies' product ranges, their strategies and histories were collected from the documents provided by the companies.

All interviews were tape-recorded. Although the recorded interviews with the owners approximately lasted between two and a half and four hours, the length of the recorded interviews were between one and a half and two hours because of frequent interruptions by phones or visitors which were not recorded. The interviews conducted with the designers lasted between 30 minutes and 1 hour, with the chief of the production lasted approximately within 45 minutes. All recordings were transcribed. Each case was read thoroughly. After the first readings, the interview reports were prepared for each case. Then the interviews were divided into three sections as the owners, the designers and chiefs of the production and they are analyzed according to this classification.

3.6. Limitations of the study

Because of the time limitations and nature of qualitative methods, it is known that, in the early phase of the thesis, the interviews could be conducted with limited number of the samples and the data could not be turned into generalized facts. Therefore, the findings and conclusions are specific to the samples.

Although these limitations were known in the early phase of the thesis, there is also an unexpected limitation. In some companies, the interviews could not be conducted with the intended actors in determined positions because the tasks of these distinct positions were being executed by the same person. Consequently, the interviews which were intended to be conducted with the owner, the designer and production manager in each case could not be realized and their positions against each other could not be analyzed in some cases.

CHAPTER 4

CASE STUDY

4.1. Introduction

In this chapter case summaries of the eight interviewed companies will be provided in order to form a basis for the evaluation of the interviews which will be carried out in the next chapter.

4.2. Case Summaries

The case summaries of the companies include their short histories, changes in their scope of activities, their management structures, information about their production types. This information also is illustrated in Table.4.1.

Table.4.1.Managements and changing scope of activities of the cases

	Types of the ownership	Top management of the company	The company's scope of activity	The company is founded as	Age of the company
Company A	Multi-owned	Shareholders	modular home and office furniture production	Kitchen and bathroom cabinet producer	18
Company B	Single-owned	The owner	Wooden office furniture production	Office material supplier	41
Company C	Family-owned	The owner	wooden furniture production	wooden furniture producer	55
Company D	Family-owned	Shareholders	Wooden and metal office furniture production	Wooden and metal office furniture producer	50
Company E	Family-owned	shareholders	wooden furniture production	carcass producer for armchairs and sofas	27
Company F	Multi-owned	shareholders	wooden furniture production	wooden furniture producer	5
Company G	Family-owned	shareholders	wooden furniture production	Wooden furniture producer	29
Company H	Single-owned	The owner	wooden furniture production	Furniture dealer	17

4.2.1. Company A:

Company A is a partially family owned modular furniture producer founded in 1990. The company develops, manufactures and markets modular furniture such as office and computer tables, file cases, multifunctional storage units and TV cabinets made from panel. Its products are sold in company's own showrooms and some large-scale international stores.

The company was founded by the older brother. He bought some furniture machines in a foreign machine fair in order to sell it in Turkey. However he failed to sell some of the machines and decided to establish a workshop himself. Consequently the company started to produce kitchen cabinet but did not compete with the other companies within the kitchen cabinet production field in the lack of new product development strategies. The founder of the company invited his brother who is the chairman of the board to contribute the management of the company in order to increase the competitiveness of the company. After his joining, the design team was founded and some new cabinet doors and modules were developed. Company realized many projects throughout the 1990's. Production of the kitchen cabinet for contact projects continued until 1999 and the product line of the company was turned into modular furniture.

Present share holders of the company consist of four brothers and a former staff of the company. Currently, both of the younger brothers and the partner who is not a member of the family have active positions in management of the company. One of the brothers who graduated from business administration is the chairman of the board and the other who is an economist is responsible for marketing. The partner who is the former staff is an industrial engineer. He is the production director and responsible for the optimization, automation and product development.

Although all of the partners participate to the product development processes, the ultimate decisions are shared between the chairman of the board and the production director.

Since there is not only one owner, the chairman of the board is regarded as the owner and the interview is conducted with him. Although the director of production did not have any design related education, the designer interview is conducted with him because of his experience with product development and designs of the products.

Some of the company's products are registered as industrial designs. Chipboard panels which were produced with special finishing only for the company were the main material for company's products. Company's office chairs and some of the hardware used for the products are also developed and produced in tandem with some subcontractors abroad.

4.2.2. Company B

Company B is a forty-year old family owned modern office furniture producer. Its product range consists of office tables, bookcases, wall equipment etc. All products of the company are medium or high end products and they are sold in the company's own showroom. The company also carries out some special interior office projects and refurbishments such as city halls, head offices etc. besides the production and marketing of its own products, the company also imports some products which are known as designer products. The company also won an international design award in the early 2000's, which turned into a symbolic capital for the company. The owner of the company complained about the high expectations of consumers and obligations brought by this symbolic capital such as constant necessity for novel products.

The firm was founded as an office materials supplier in 1967 by the present owner's father who was a lawyer. In the early years of the company, office furniture was imported from abroad. After a while, the first owner decided to produce furniture instead of importing them. This is the milestone of the company, but shortly thereafter the founder of the company passed away and then the present owner of the company who was an economist had to undertake the company. In those years, local furniture producers produced similar products;

however the owner of the company realized that in order to have an advantage, the products should be produced in better quality than the existing furniture in local market. So the company had a reputation for producing good quality furniture.

In 1982, company started to export its products abroad. However the owner of the company realized that the imitation of the European furniture could not compete with their originals, even though they were in better quality. Then he decided to produce distinctive products.

Until the mid 1990's, company positioned in-house design team which consisted of architects and interior designers. Since the mid-1990's, it outsourced design expertise. However some products of the company were developed by in-house product development team.

Although the production technology of the company is based on low-tech and labor intensive techniques, some parts of their products which require highly technological production and some metal parts are produced by company's subcontractors.

The owner of the company is also the general manager. Besides him there is an architect responsible for contract projects and marketing and a woodwork industry engineer who manage the production. They also participated to the product development processes of the products designed by external star designers.

4.2.3. Company C

Company C was founded in the beginning of 1950's in Ankara. The founder of the company was a furniture craftsman. The company produced labor-intensive furniture mostly for contract projects until the mid 1970's. The owner of the company was known as pioneer in furniture design in those days because of his challenging products such as a wardrobe which had an extraordinary dimension. Then he decided to close its workshop and to continue only developing and

marketing his products. The company's workshop was turned into a showroom in which wooden labor intensive furniture were demonstrated and sold.

The products of the company were produced by subcontractors until late 80's when the son of the owner had completed his industrial design education and participated to the management of the company. After that, the company's workshops were opened and production for contract projects started again. In the mid 1990's the company opened its factory, but it continued to be in tandem with subcontractors for the production of its labor-intensive products. In the beginnings of the 2000's, the second generation owner opened a separate design office but also continued to take part in the management of Company C. Because of company's long history, it continued to occupy a prestigious position within the furniture production field.

Company's product range consists of wooden and upholstered home furniture based on craft and some special products which are produced for clients. The other company which is founded by the second generation owner was also among the clients of the company C. It carries out a lot of interior decoration for both in local and international projects.

Production lines of the company and its subcontractors are based on low-tech and labor intensive techniques. Some subcontractors of the company are its former foremen. Therefore the company had a production tradition which is strictly preserved. So, the company has a loyal consumer group which contains second generation consumers of the company.

The first generation owner of the company conducts all activities within the company from idea generation to marketing. The second generation owner participates only to the design process of some of the products of the company. Although, the designs of the new products are developed by both first and second generation owners according to the styles of the furniture, the designer interview is conducted with the second generation owner because he is an industrial designer.

4.2.4. Company D

Company D was founded in 1958 in Sivas as a producer of metal and wooden office furniture. In 1978, the founder of the company decided to move the company to Ankara. After the moving the second generation owners started to work with their father. Although the founder of the company was a craftsman who was educated through apprenticeship training, his sons had different occupational backgrounds. The main aim of the present partners was to pass the company to the third generation.

Since there was not only one owner like Company A, the owner interview was conducted with the owner who is responsible for the production. Although he was an economist, he stated that he had to learn every detail about furniture production. Consequently, he could participate actively in every stage of the product development process.

The scope of the activity of Company D includes development, production and marketing of metal and wooden office furniture, dividers, office chair etc. for their product range sold in its local and international retailers and for some large scale contract projects such as governmental offices, head quarters. The major part of the company's production is comprised of furniture production for contract projects. Some products of the company are also developed for those projects and then they were included in the product range of the company.

There exists an in-house design team consist of two newly graduated industrial designers and a forest industry engineer who is also responsible for research and development for seven years in the company. Besides the in-house design team, the company has a design consultant for a long time and also commissions some well-known local and international designers. However, for the case study, the designer interview is conducted with the forest industry engineer because the other members of the in-house design team have not yet participated any product development process and there are also no possibility for contacting the external designers and design consultant of the company.

The company's production technology includes both high-tech and low-tech methods. Developments of new products were triggered by both the need for novelty and the new contract projects.

The company also is the founding member of two active non-governmental organizations of furniture manufacturers and member of The Business and Institutional Furniture Manufacturer's Association, IQNET Association and Furniture Industry Research Association. The owner of the company participates in the projects which are conducted by these organizations and associations. These kinds of memberships which can be regarded as the company's social capital allowed it to be in some networks in which the members concentrated on novelty and innovation.

4.2.5. Company E

Company E is a family owned wooden furniture and upholstery producer since 1981. Besides manufacturing, development and marketing of the products are included in the scope of the activity of the company. Company E's product range consists of wooden bedroom and dining room groups, TV units, coffee tables, sofas and armchairs etc. and they are sold by company's national dealers.

The company was established as a carcass producer for armchairs and sofas in 1981 in Ankara. Although it is still owned by its first generation founders, the company left the production business and acted only in furniture marketing between the years 1990 and 1995. In 1995, owners of the company understood that marketing business did not work without controlling the production of the products. In order to control the quality of the products which the company sold, the owners of the company decided to open their production unit again. Different from the early years of the company, it was decided to include the production of wooden furniture such as tables, cupboard and TV units besides upholsteries. While these decisions were realized, Company E also established its present brand.

Although, in the early years of the company, its product range was consisted of low end products until the establishment of the present brand of the company, its present products are regarded as A class and high-end products by the owners and the designer of the company.

The owners of the company are three brothers. The oldest brother who is a woodwork teacher is the chairman of the board. The younger one who is also responsible for financial tasks is the general manager and the youngest brother is responsible for the management of the production and product development, both of them are also former carpenters. The owners of the company want to pass the company to the second generation who are training in interior decoration and woodwork industry engineering.

The general manager of the company was interviewed as the owner but he could not tell the top product story and answer the questions which are related to product development process because he did not participate to the development process of any product. He wanted to tell the company's problems which are related to product development and the infrastructure which underlay the product development and design process. So the owner interview is conducted with both the general manager and the production and product development manager.

Before the employment of a designer the products were developed by the production manager and some craftsmen. This kind of practice can be regarded as 'silent design;' which is mentioned by Jarvinen and Koskinen (2001). However, the owners of the company perceived that to develop distinctive furniture by "silent design" was not the correct way to compete in the market and they decided to employ a designer. In 2001, the company employed its first in-house designer who was an interior architect. After three years, an industrial designer who is also present designer employed as in-house designer, shortly thereafter the company changed its logo and products' style.

4.2.6. Company F

Company F is a relatively young upholstery and wooden furniture producer founded in 2003 by two partners in one of the new industrial districts in Ankara. The owners of the company also have separate companies and work in collaboration with each other. Before the foundation of the company the younger partner's firm developed and manufactured its furniture and sold them to the older partner who has one of the known furniture shops in Ankara. After a couple of years, the partners planned to establish a new company which produces totally modern furniture, to turn it into a known brand and to sell its products only by its retailers. In 2003, the company was founded and the first products of the company were produced by a couple of subcontractors in Sıteler. The company started to sell its products through its dealers. Afterwards, the company had to establish a factory due to growing demand contributed by the ads which were published in the popular interior decoration magazines.

The older partner is the chairman of the board, the younger partner is responsible for the development of the concepts and products, design processes and image of the company. The younger partner is second generation in furniture production and the older partner is the first generation in furniture marketing.

The company's product range consists of labor intensive home furniture which is sold by the company's twenty five agents four of which are located in foreign countries. The company relies on the visual features of its products for competition because the partners of the company believe that the preferences of consumers are based on their first impressions.

Although the targeted consumer group of the company is the upper income group, the owners of the company decided to target the young middle income group and they established a new brand for this group. The product range of the new brand has similar visual features with the company's main product range but they are economical products.

4.2.7. Company G

The company was established in 1979 as a small workshop in Ankara Sıteler. It is owned by two brothers who are also founders of the company. Both of them are carpenters and are trained through apprenticeship. The company produced its products in modern style in the early years. Its product line consisted of basic household furniture such as bedroom group. After a couple of years, company's style shifted to classical and its products turned into labor and ornament intensive furniture. In 1987, the company changed its location of production facility as a result of rapid growing of the company. During the 1990s and early 2000s, the company invested on different businesses such as textile.

In 2006, the company changed its product range, targeted consumer groups and its brand because of the changing demands, tastes and lifestyles of consumers. The present products of the company consist of again modern wooden household furniture and upholsteries. While these last changes occurred, the owners of the company sold their other businesses and focused on the furniture production again. The company changed its location of production facility and moved in a new factory building in a large industrial district in Ankara. Company G is in the period of development of its new product line and also of establishment of the network of its agents.

The company commissioned a design consultant for two years and also the owners of the company decided to employ an in-house designer for concept and product development. Company's present design consultant is an architect and his responsibilities are to develop new concepts and prepare first drafts of the products in accordance with the new concepts. There is no responsibility for the designer in the other stages of the product development processes.

The main aims of the owners of the company are to produce high quality and distinct products and to market them through its own network of the dealers. One of the owners, the chairman of the board, is responsible for the product development processes and the other owner is the production manager. Both of

them also share the responsibility of decision making. In the research phase of the present thesis, the owner who is the chairman of the board is interviewed as the owner and the designer because the company ended the collaboration with the designer.

4.2.8. Company H

Company H is a labor intensive wooden and upholstered household furniture producer in a large industrial district in Ankara. The company was founded in 1991 as a furniture seller and it was turned into a furniture producer in order to meet the company's need of high quality furniture. In 2001 the company changed location of its production facility and increased its production capacity. In recent years the company has been sold its products through its local and international eighteen dealers. Although the production of the company is based on household furniture, some large scale contract projects such as hotel interiors are realized by the company.

The owner of the company is first generation and his professional background is in marketing. In the company there are two employees who are responsible for product development and design. One of them is a woodwork industry engineer and the other is an architect but her main responsibility was marketing.

The targeted consumer group of the company is upper-middle income group and the company has never changed its targeted consumer group and products' style since its foundation date.

In the past, the company commissioned external designers for product development but when the company moved to its factory building, the owner of the company decided to develop products internally and an in-house designer who is an industrial designer was employed. Then the company continued to develop products internally. However, after the resignation of the industrial designer, approximately for two years, the company did not employ any professional designer.

Although the company's in-house employees who are also responsible for design constantly developed new products, the company does not apply to register them as industrial designs. However some of the former products which were developed by external professional designers were registered as industrial designs.

CHAPTER 5

COMPANIES AS SOCIAL FIELD WHERE DESIGN OCCUR

5.1. Introduction

This chapter aims to analyze the companies as a social field where within a division of labor which largely defines the positions which are occupied by the actors struggling for increasing their stock of capital against the others. Although my analysis lays an emphasis on the design and designers position in such a structure the analysis also contains the companies' organizational structures, organizational cultures and management strategies.

In the following sections, organizational structures of the cases will be analyzed within the decision making process and division of the tasks and organizational cultures of them will be analyzed with the practices, customs, beliefs and values in the companies.

5.2. Impacts of the companies' structures and management strategies on design and its position within the new product development processes

As mentioned in the previous chapters, product development is a core activity in any industry and one of its most important phases is design. However, in the current literature, it is emphasized that well managed design process is not adequate to develop successful products because design and other activities within the product development process should be managed as a whole (Roy and Potter, 1990) as the overall management strategies of a company determine the way of functioning and position of each activity. Consequently, in order to analyze position of design and the designer within a corporate organization; to understand

its overall organizational structure, management strategy and company culture may be the right starting point.

Table.5.1.Types of ownership, age and use of design in the companies

	products	Types of the ownership	in-house employee responsible for design	external use of design	occupational background of the present owner	Age of the company
Company A	modular home and office furniture	Multi-owned	industrial engineer	none	business administrator	18
Company B	office furniture	Single-owned	woodwork industry engineer + architect	industrial designer	economist	41
Company C	home furniture	Family-owned	(owner's son) industrial designer		woodwork teacher industrial designer	55
Company D	office furniture	Family-owned	forest industry engineer	industrial designer	economist	50
Company E	home furniture	Family-owned	industrial designer	none	carpenter	27
Company F	home furniture	Multi-owned	none	none	business administrator	5
Company G	home furniture	Family-owned	none	architect	carpenter	29
Company H	home furniture	Single-owned	woodwork industry engineer	none	business administrator	17

Among the eight cases, there were four family-owned, two single-owned and two multi-owned companies as shown in Table.5.1. All of them were founded as micro organizations and managed by owner-managers in their early periods as in most new established small enterprises. Their organizational structures were informal because of their size and their limited resources in the beginning. When the time passed, all companies grew and different necessities for organizational changes

appeared. Each of the company had to develop different strategies for meeting these necessities and approaches to the new functions.

5.2.1. Professionalization in the companies

In all of the interviewed companies even in the youngest one, Company F, there were many changes mentioned in Chapter 4 from scope of the activities to the production places of the firms. However structures of the companies remained intact throughout these changes.

Table.5.2.The actors in key positions in the companies

	products	Top manager	Design related internal key actors	Design related external key actors	Production related key actors	Age of the company
Company A	modular home and office furniture	One of the partners	One of the partners (industrial engineer)	None	One of the partners (industrial engineer) and a carpenter	18
Company B	office furniture	The owner	A woodwork industry engineer	industrial designers	woodwork industry engineer	41
Company C	home furniture	The owner	none	son of the owner as external industrial designer	The owner	55
Company D	office furniture	One of the partners	A forest industry engineer	industrial designers	woodwork industry engineer	50
Company E	home furniture	One of the partners	in-house industrial designer	None	One of the partners (Carpenter)	27
Company F	home furniture	One of the partners	One of the partners	None	carpenter	5
Company G	home furniture	One of the partners		an architect as design consultant	One of the partners	29
Company H	home furniture	The owner	A woodwork industry engineer	None	woodwork teacher	17

In five out of the eight cases, Company A, Company C, Company E, Company F and Company G, as shown in Table.5.2., almost all of the key positions were filled by the partners of the companies since their early periods, the necessities of

dividing tasks and responsibilities of the management were met mostly by the partners or their relatives instead of hired personnel even when there was a need for different professional knowledge which the partners or their relatives did not have.

These companies' inclination to appoint available person instead of professionals for the key positions which require competency and knowledge should be regarded as a critical issue.

Only three out of eight companies, Company B, Company D and Company H were partially professionalized companies. The owners of these three cases prefer to employ professionals to assign to the key management and required new positions. When these companies' characteristics are examined, some differences from the other cases can be identified easily. Company B and Company D, are the oldest companies and they are the only office furniture producers among the cases. There were also another similarity between two of them, both of the companies were managed by the second generation owners. Their long term experiences related to the furniture industry also should be taken into account when their approaches to management of design and other functions within their organizations. Among these three cases the type of ownership of Company B and Company H was different in that both of them were single-owned companies.

The owner of Company B was the general manager of the firm; his cultural capital was related to economics. Necessary knowledge and cultural capital for other activities within the company such as production and marketing were acquired by employing professionals. However, positions of some of the professionals were inconsistent with their role in the company. Production manager who was a woodworks industry engineer had more dominant role in product development processes and design phases than the project and marketing manager who was an architect. This is partially resulted from the employees' long term job experiences and from the company's customers consisted of mostly architects and interior designers. The company did not have design department, and design related cultural capital for prestigious products acquired by commissioning

external star designers. To commission a star designer also provided symbolic capital to the company for maintaining and improving its position within the furniture production field.

For the key positions within Company H, the professionals were employed such as a forest industry engineer for production planning, a former woodworks teacher for the management of the production unit. The owner's preference for the management position of the production unit is resulted from the production techniques and product differentiation strategies of the firm because the production technique of the company was based on handicrafts. Although it may be concluded that the owner of the company gave importance to the cultural capital, his preferences for some positions was not compatible with this. He positioned an architect as the head of the marketing department like the owner of Company B. While the owners of Company B and Company D preferred external professional design expertise for the prestigious products and to develop some products by silent design, Company H employed a woodwork industry engineer as the designer to develop all of the products of the company.

Contrary to these two firms, Company D was a family-owned firm and positions of the top management were shared among three brothers who had university degrees. However, for the other critical positions which require special competencies, professionals were employed. The company's owners' approaches to cultural capital could be easily observed in their management policies.

When we consider the five companies' inclinations for positioning the partners, their relatives or available persons for the key positions even in the case when they were not competent, economic limits can be considered in first glance as the most common factor which affected the companies' preferences. However, the interviewees did not mention economic problems. Furthermore the owners of the companies had enough economic capital to invest on new machineries, workshops and showrooms. In that case, there exist some other factors which should be considered such as the needs for the job creations for the partners and their family members (Chrisman, Chua, Zahra, 2003) or unaware owners or managers who did not know the consequences and benefits of working with

professionals. Nevertheless, for these five cases, the positions of the shareholders who manage the production units should be considered by taking into account their tacit knowledge and experiences.

In Company A, one of the two multi-owned cases, all top management positions were occupied by the partners and their relatives, all of the managers were the members of a family except one. The exceptional position was the management of the production. Although the production manager was not the member of the family he was one of the partners. His profession was industrial engineering and he brought his professional knowledge to the company approximately a decade ago. After a short while from his employment, the founder partners wished to include his cultural capital in the other kinds of capitals of the company. Then, the founder partners proposed him to participate among the shareholders of the company. This wish of the founder partners may be interpreted as the reflection of their view that educational (cultural) capital should be positioned within the top management. Head of the marketing department may be considered as another case which reflects the shareholders approaches to cultural capital. Head of the marketing was the youngest brother and he was sponsored by the founder members in order to be educated abroad in business administration.

The other multi-owned firm was Company F. The company had to develop rapidly and reached an unplanned scale just in three years because of the high demand for their products. Nevertheless, its organizational structure was not developed. All decisions and management of all the departments still depended on the two owners of the company.

The older partner who also had more share participated only in top management and finance related tasks, however the younger partner organized almost all of the practices related to product development and production. The other key position, management of marketing and advertisement, was filled by the wife of the younger partner. There were no managers or employees who have required professional background in the main departments except finance. Additionally, no clear statement was obtained about the educational background of the employees. During the early periods of the interview, the owner responsible for

design stated that the design and product development team consisted of architects; however, it was observed that there were only two furniture technicians in the team who were responsible for the visualization of the ideas of the younger partner and preparation of the production drawings. Consequently, among the cases Company F may be interpreted as the least professionalized organization.

Company F had no prior experience of working with a professional designer. Its original products were designed by the younger partner whose professional background was business administration. The partners of the company considered that the cultural capital required for designing distinct products could be obtained without design related formal education. Furthermore, he stated that he had not met any designer who really designs distinct products in Turkey. The owners of the company persistently emphasize that they have very intensive design related tacit knowledge and as a result of this knowledge they could develop successful products.

In the three family-owned companies, state of the professionalization within the company structure exhibits similar characteristics to the multi-owned companies'. Company C did not employ any professional because all managerial tasks were performed by the owner and his son. However the son of the owner was an industrial designer and he may be considered as the required professional. Although, in Company E and Company G, finance and production departments were managed by the family members who were also the shareholders of the companies. The owner-managers in both of the companies did not have cultural (educational) capital related to their tasks; all of them had tacit knowledge and experience. However when we consider the product development and design, companies' owners preferred professional and codified knowledge for these practices, while company G preferred to commission an architect as external designer, Company E employed an industrial designer as internal design expertise for the management of product development department and gave her a central position within the firm, although they were among the least professionalized companies.

5.2.2. Organizational structures and cultures of the companies

When the eight cases' management strategies were examined it was seen that the mechanisms of decision making process and organizational structure of the cases exhibited similarities. Decision making processes in all of the companies were centralized as shown in Table.5.3. and their organizational structures may be regarded as hierarchical and functional because the departments were divided according to the major tasks in all of the companies. All activities within their structures were influenced by the owners because they were the most dominant actors. Hence it might be concluded that the most common culture within the cases was the power culture.

Table.5.3.Organizational structures, management strategies and their reflections on new product development processes and design

	Decision making	Organizational culture models	Management strategy	Ways of incorporation of design	design strategy	Design practice
Company A	centralized	rational goal and internal process models	Cost-leadership	Process driven strategy	incremental	Silent design
Company B	centralized	human relation and open system model	differentiation	Business identity motivated and product driven strategies	Radical and incremental	Professional and silent design
Company C	centralized	human relation model	differentiation	Business identity motivated and consumer driven strategies	incremental	Professional and silent design
Company D	centralized	open system and rational goal model	differentiation and cost-leadership	Business identity motivated and consumer driven strategies	Radical and incremental	Professional and silent design
Company E	centralized	open systems model	differentiation	Product driven and business identity motivated strategy	Radical and incremental	Professional design
Company F	centralized	human relation and open system model	differentiation	Fashion driven strategy	incremental	Silent design
Company G	centralized	human relation model	differentiation	Business identity motivated strategy	incremental	Silent design
Company H	centralized	human relation model	differentiation	Business identity motivated strategy	incremental	Silent design

In **Company A**, similar to the other cases interviewed, the largest department was production because it contained the product development, optimization, purchasing and production units, however, finance and marketing departments consisted of limited personnel. Each department was managed by the managers yet it was observed that throughout the product development stories of the interviewees of the company, all major decisions related to the departments were made only by the top management.

The definitions of the tasks, rules and processes within the three main departments did not exist as written documents. They were functioning with implicit rules in an informal structure. Although it was not a written objective the main emphasis was on minimizing cost and maximizing productivity with rational analysis and measurements in product development process in the company as in both rational goal and internal process models. Within this perspective, the production manager had a central role in the product development process because of his professional background (cultural capital). To be an industrial engineer provided required equipment for him. On the other hand, chairman of the board had a central role in overall processes because of his economic and symbolic capital. Their dominance may be regarded as a reflection of the power culture in the company.

Company B had three main departments which were in its organizational structure, production, project & marketing and finance. Although the company had a formal organizational structure scheme required by ISO 9001 Quality System, it operated based on its informal undocumented structure. Similar to Company A, the largest department of Company B was the production; all of the activities related to product development process were conducted within this department, furthermore, most of the activities were performed by the production manager. As mentioned in the previous section, while the external star designers had the most central role in the product development processes, the most dominant actor in the production phases of product development process was the production manager because of his production related knowledge and he had partially the right to make some decisions which were related only to the technical aspects of production. During the interviews, both of the managers indicated that the owner

usually asked their opinions on important decisions related to the new products nevertheless top management of the company consisted of only the owner and all decisions were made by him. In Company B there coexisted two organizational culture models, human relation model affected the positions and activities of the owner and other effective actors and open system model allowed to be in relation with the external factors which trigger the innovation.

The only company which did not have an internal production department was **Company C**. Although, the company had a professionalized and formal organizational structure for a while in the past, as a consequence of some negative factors in the market the structure of the company was turned into a traditional and basic one in which most of the tasks were practiced by the owner-manager again. This change in the organizational structure of the company may be interpreted as the reflection of the contingency perspective in the management approach of the owner.

The departmental division within the company structure differed from the other cases. The company had two main departments, namely sales & marketing and finance. Both of the main departments were managed by the owner in an informal organizational structure. All functions whether in the company or in the subcontractors were managed and organized under the effects of the human relation model based organizational culture. The company did not have a design department; however, the interior design firm of the owner's son served as the design department for the company in some cases. Although the owner did not have a degree in design related disciplines he had the required symbolic capital because of the success of the products developed by him and reputation of the company. From the interview it may be concluded that, within the company structure, the owners' symbolic capital which also provide the economic capital provided him more dominance than his son's cultural capital and as a consequence he had a central role in decision making process and management of the company.

Although the owner of Company C did not commission any professional designer in the past until the end of his son's industrial design education, the orientation of the owner's son towards industrial design field may be interpreted as the reflection of an unmentioned need for professional design practice in the company. The owner's tendency not to employ any unfamiliar professional may be associated with the conservative behavior patterns in the management of traditional family firms which were mentioned by Broom, Longenecker and Moore (1983).

Among the eight cases **Company D** may be regarded as the only firm in which division of tasks was more complex because the design, R&D, ads & marketing and human resources departments existed in its structure besides other functionally divided units. However these departments functioned in an informal way and there were not any rules or descriptions for the processes. Like the other cases the decision making process was centralized in the top management and each of the owners had dominant roles in different departments because of their long term experiences in the company. The interviewed owner was the most dominant actor in the management of the production and product development and all decisions related to these activities were made by him. The largest department was production, and also the company had a design department which should be one of the most dominant part of the product development process, however, the employed internal designers could not be stable for several reasons. According to the owner, there were many constraints on organizing the functions in all of the processes in the company as well as design. The main problem which was mentioned by the owner was inadequate education for professionals who were not familiar with industrial production processes.

"...actually, there are so many problems, I mean, if only in the other departments. Firstly they should be resolved in my opinion, I mean, chief of production, planning, logistics, purchasing. I mean, these studies should be executed, firstly to solve those. I mean, I appreciate design but this is another issue."

(Owner of Company D)

(Original quotation can be found in Appendix E/ Q1)

Developing distinct products was one of the main objectives of the firm besides minimizing cost and maximizing productivity. So, the management of the

company preferred to focus on the external factors which may trigger creativity as well as rational analysis and measurements in internal processes. Hence, as the organizational culture models, the open system model coexisted with the rational goal model.

Company E was the second company which had a design department and employed designer within its organizational structure. Besides design department, production, marketing and finance were other main departments of the firm. The organizational structure of the company was basic and informal because there were not any rules or descriptions related to the tasks and the structure. The decisions related to the activities of the departments were made by the manager directors, all of them were the shareholders of the company except the head of the design department. Only top level decisions were made by a committee which consisted of the shareholders. The production department was the largest department of the company like in the other cases however it was not the most dominant unit. The design department and the designer had more central position within the product development process. She had cultural capital because of her profession, she was an industrial designer. However it was her symbolic capital within the company which provided her more dominant position because of the market success of the products designed by her.

During the interviews conducted in all of the cases, as a consequence of the dominance of the owner, the power culture was turned into one of the most common cultural models. However, in Company E, it was the designer who affected almost all of the activities in the company as a dominant central figure.

During the interviews conducted with the designer and the owner who was responsible for the production unit, both of the interviewees stated that their expectations and ideas related to any product which would be developed were similar. Within the habitus perspectives of Bourdieu (1989), this may be interpreted as the indicator of the similarities or familiarities between the habitus of these two effective actors. So, this should be taken into account as one of the determinative factors which affect the position of the designer.

It was observed that all of the interviewees often mentioned the importance of the distinctiveness and quality of a product. Therefore it may be concluded that the distinctiveness and quality were among the shared values in the organizational culture of the company. Consequently, the organizational culture model for product development process was the open systems model. The production manager and the designer were focused on creativity and continual innovation triggered by external factors.

The companies which did not have design department in their organizational structure admitted that their organizational structures and especially the positions of design in their organizational structures were very weak. However, the owner of Company F who was responsible for product development did not mention absence of a designer as a problem or a weakness in the organizational structure; furthermore, he stated that they did not feel any need to establish a design department because, according to him, he and his partner were competent enough to develop and design products of the company.

“... We have not carried out these kinds of practices yet. Actually, we can do, I mean we really could carry out this kind of practice but such a requirement has not appeared yet. May be it is resulted from that I have a partner, Mr. Ahmet, I mean, his sense of aesthetics is also great. Thus, we do not have difficulty with this matter.”

(The owner of Company F who was responsible for product design)
(See Appendix E/ Q2)

The structure of the company was divided into three main departments according to the basic functions in a manufacturing company; they are production, finance and marketing. All product development related activities were performed within the production unit only by the owner responsible for production. Although his cultural (educational) capital was not compatible with his position and he did not have the larger part of the economic capital, he had a central role within the product development process and production. His strength came from his symbolic capital acquired by designing and developing best selling and distinctive products when he was working in his father's furniture production company. All decisions whether top level or not were made by the owners and all of the management responsibilities were centralized. Organizational culture of the

company was based on human relations model. All tasks were performed based on implicit rules and personal relations rather than formal rules and documents. Although the human relations model was associated with the organizational culture of the company, in the product development process, the existence of another organizational culture model could be observed. The management of the company adopted all new trends in furniture design and interpreted them for their new products. International furniture and interior decoration related fairs were considered by the top management as source of inspiration. So their approach may be interpreted as the reflection of the company's other organizational culture associated with the open system model.

When the owners of **Company G** decided to manufacture modern style furniture rather than traditional, they also understood that they should change company's organizational structure and technology. The new factory building of the company was designed to meet the spatial and technological needs of a formal and professionalized organization. However, neither its organization structure nor the division of departments fit their plans. The top management of the company which consisted of two owner managers, the production manager and the general manager, built and furnished the rooms for the design, branding and marketing departments; however, all of them were empty. In order to survive, company had to take on some subcontracting jobs and consequently, they could not focus on professionalization. During the interviews, the job ads of the company were active in many human resource web sites. The present organizational structure of the company was informal and basically functional; only two departments were active in the company, which were production and finance. Additionally, the management of the company commissioned an architect to design some products for them.

Both of the departments and all activities within the product development process were controlled by the owner as a consequence of the power culture in the company. Besides the management of the company, the owner also makes all decisions related to product development process.

“The final decision is taken by me, because it is me who will be responsible from the marketing and exhibition of this product. I am taking the risk on the production and marketability of this product. However, even if I make the final decision I often listen to the opinion of the staff. “

(Owner of Company G)
(See Appendix E/ Q3)

Although, during the interviews, the organizational structure of Company H was mentioned as “democratic and nonhierarchical” by the two interviewees, the employee who was responsible for design and product development and the production manager, all of positions, practices and employees were determined and controlled only by the owner. His preference for acting in an informal structure formed an organizational culture based on human relation model.

The largest department, as in other cases, except Company C, was the production unit in Company H; the production department contained all R&D, product development and planning related activities besides production. The finance and the sales & marketing departments were mentioned as other departments in the company. The organizational structure and the division of the tasks in the company were not determined formally in any written documents.

To produce craft based and good quality products may be interpreted as the main objectives of the company. As a consequence, the most important asset of the company was craft and traditional techniques based knowledge. The actor who had the required knowledge was the production manager; he was a retired woodwork teacher. His cultural capital was the most effective factor which provided him a central position, along with the designer, within the product development process in the past. From the interview which was conducted with the production manager it was concluded that he was not satisfied to work within the existing structure of the company and present staff. He stated that the former managers and design related employees were more efficient because of their cultural, social and symbolic capitals which were convenient with their practices.

“Actually, we started the business in better conditions. There was a designer who was graduated from METU. He worked with us for one or two months, then he went. His drawings were great, he made designs but he found another job, then he shifted to another firm. We could not hold him up. In the beginning, our style of acting was perfect. Although we could not sell very well we produce great stuffs.

(Production manager of Company H)

(See Appendix E/ Q4)

In the present structure of the company, as implied by the interviewees, contrary to the early periods of the company all management related duties were gathered in the owner's hand. There was not a top down hierarchical structure, all employees were directly related to the owner and also they acted according to his directions as a consequence of the company culture based on human relation model.

5.2.3. Management strategies and their reflections on new product development processes and design

As mentioned in the previous section, except Company C, the largest and most dominant department in each case was production because of the companies' scope of activities. Each case's main activity was based on producing marketable furniture. However their criteria which determine marketable products were different from each other.

The competition strategies of the interviewed companies exhibited some differences; however, all of them, except for one case, focused on differentiation and their main objective in new product development processes were to produce distinctive products. The differences in the competition strategies of the interviewed companies may be regarded as one of the reflections of their managers or founder's business perceptions and management strategies.

The exceptional case was **Company A**. although the company focused on price based competition; to develop distinctive product was not neglected totally by the company; it was adopted as a secondary competition strategy.

The main objective of Company A was to produce and sell low-priced, simple and neutral but good quality products, as mentioned by the interviewees. When the selection criteria of all three interviewees of Company A are considered, these product specifications appeared as the features of the most successful products for the management of the company. Although these three criteria which their products must have mentioned in equal values, the main emphasis was on low-price and the company competed in the market with price based strategies. Hence the company's management strategy may be associated with the cost-leadership which works in functional structures. However to say that the cost leadership was the only management strategy of the company may be an inadequate comment because the managers of the company also focused on the ease of use, simplicity and neutrality of the products and this may be interpreted as the reflection of the differentiation strategy of the management.

To develop new products is the continual and the most important strategic activity in the company. The company's product development methods include to improve its existing products incrementally as well as to develop new products (radical product development). Since its foundation date, quality and economics of the products have been central parts of the company's product development strategies.

The owner and the design responsible partner of Company A considered that the economics of a product was provided by minimizing costs. To minimize material costs mostly depend on suppliers so it may be regarded as dependent on mostly external factors. However, to minimize labor cost was an internal issue for the manufacturing companies and it can be provided by mechanized processes rather than craft and labor based production. So, the innovation perspective of the company was intensively based on the process which allows minimizing costs. Company A may be regarded as a process-based innovative firm, its production line consists of both low-tech and automated machines. The main emphasis in the new product development process is on the compatibility of design of the products with the production system of the company. The management's expectations from the design function were ease of production, speed to market, reducing product

and process costs (Heskett, 1999; Trueman, 1998). Therefore the company's strategy for incorporating design into its product development process can be interpreted as similar to process driven strategy.

"Since I have been heavily involved in the production process and had some experience in design process, I often generate these new design ideas. Then we discuss and evaluate them with our designers. As a matter of fact in most cases, I generate the idea then we turn them into prototype. Then production unit realizes the production of this new design."

(The owner of Company A)
(See Appendix E/ Q5)

Almost all of the products of Company A were developed and evaluated by the production manager and chairman of the board. In another word, they are the product development team of the company. Although there was not a design department, there were two employees named as designer. However they were not professional designers and they were mostly responsible for visualizing the product ideas of the production manager and the chairman of the board. The designers' responsibility also included the preparation of the technical drawings related to production. Although they did not mention the idea generation, concept design and product design as design related duties in product development process, all of these activities were performed by the production manager and chairman of the board. Their intensive involvement to the design phase of new product development process may be interpreted as an obstacle for positioning a professional designer. As a result, they could not perceive the potential benefits of working with a professional designer. Actually their habitus structured by their socio cultural backgrounds, their long term experiences and relationships in furniture production field affected their design perception and capacity of appreciation.

Consequently, it may be concluded that the owners of Company A preferred silent design in product development process. According to the effective actors of Company A, professional design was considered as a practice which is related mostly to visual features of a product. Furthermore, it was implied that participation of a designer to product development process mostly increases the

cost of the product and decreases the ease of use. Therefore the top management of the company was closer to the engineering side of design.

Throughout the interviews in **Company B**, some reflections of the company culture can be observed through the interviewees' selection criteria for the most successful products. Instead of best selling products, the distinctive and craft based products were selected by the interviewees as the most successful products of the company. Furthermore, the product which was selected by the owner was one of least selling products. Therefore, it can be concluded that the management strategy of Company B may be considered as differentiation based because the company focused on producing distinct and in good quality products. The management strategy of the company was overlapped with the organizational culture within the firm. While developing distinctive products the company also enhanced its image which can be turned into a perceived value of products for the consumers of the firm.

As mentioned in previous section; the organizational culture of the company was based on open system and human relation models which provide required environment for differentiation and innovation. The company did not prefer competing based on price, however, in recent years; the owner of the company imported some economical products and sold them under company's brand because of tough condition in the market.

Since the company situated design as a strategy, its consumer group continuously expected distinctive products from the company. This may be interpreted as "the business identity motivated strategy" for incorporating design into the product development process of the company. To meet the consumers' expectations turned into a motivation for positioning design because of one of main functions of design which was called as "the consumer focus" by Heskett (1999). However, the present owner stated that being a design-based innovative company sometimes turned into a disadvantage because of high cost of original designs. Another motivation for incorporating design into the product development process was that, in 1996, the company was selected for the World Design Yearbook with one of the company's product and this was a milestone in the

history of the firm and then design was turned into a necessity. Hence, “the product driven strategy” may be associated with the company’s other way of incorporating design into the product development process. Whether as a consequence of the effects of “the business identity motivated strategy” or the “product driven strategy” (Bryson and Rusten, 2005), all of the interviewees in the company implied that to develop challenging products was a capacity developing activity for both the company and the actors. These two strategies and the actors approach to develop distinctive and challenging products may be regarded as some of the indicators of the company culture. Although to develop a challenging product is mentioned as capacity developing activity, the owner also mentioned a problem related to radical product development. He stated that the employees in production unit resist to produce new products because these new products upset their routine. It may be considered as the resistance against the designer as new position taker and her/his applications for taking position in the company.

“Of course in each design process production unit face some difficulties. It is a reality. This is the case even the designed new product is most suitable to the production process. In such situation the production team does not want to produce such new products....You also face an internal resistance. This is a social fact and also a character of human-being. When people fulfill their routine duties, they always avoid difficult issues which force them to think hard especially when their success is not guaranteed. Then, they resist and say that it is impossible to produce such a thing. That is why you have to change mentalities on the relationship between design and production. If you do not achieve this you cannot produce original things. That is why imitation is so wide-spread in the production culture of Turkey. Because it is the easy way and it suits our character. It is the most easiest and efficient way of producing something. You say that if he would produce and sell, then I could do the same.

(The owner of Company B)
(See Appendix E/ Q6)

As a result of being an innovative and design based company, the radical product development method was used for the most of the new products. Nevertheless, incremental product development method also applied for improving existing products. Within these dual product development methods, Company B had two kinds of design activities, professional external design expertise and silent design. Although most of the prestigious products of the company were developed by star designers there were also the products which were developed by the production manager and the owner. The reason for developing internal products by silent

design was stated by the owner as ‘to avoid the high cost of working with external star designers for some products’.

“Actually, our production is based on two different kinds of design practice. In the first category we produce items dictated by the designer. She says that this is what I designed and what you should produce. In the second category, we care about the marketability of a product as our most important criterion. We use the catalogues and fairs as the main source of ideas and information. We also use the feedbacks from our previous customers who propose some improvements on the products they bought. In sum, there are two ways of using design. But working with a designer is an expensive one...Of course the second one is more economic but there is always a risk.”

(Production manager of Company B)
(See Appendix E/ Q7)

Mostly the idea generation phases of the product development processes whether internal or not were performed by the owner and project & marketing department manager. The other phases of new product development processes of internally developed products were performed by the owner and production manager. Company’s approach to design was clearly defined in the presentational documents and web site of the company. In the introduction sentences, the main emphasis was on the coexistence of design and handicraft workmanship in the products of the company.

The symbolic and social capitals of **Company C** were acquired through producing distinctive and in good quality products. Consequently, these characteristics turned into the main objectives of the company. The management strategy of the company may be interpreted as the differentiation based, however, it should be considered that most of the differentiating activities were based on the owners traditional business approach and also were performed mostly by him because of his dominancy. The reflection of the main objectives which were not given up by the owner could be observed throughout the interviews. However, there were also some other objectives which mostly imposed by the owner’s son. The owner’s son selected an office armchair as the best product and the owner stated that he agreed with his son. However, in the advanced phases of the interview conducted with the owner, a labor intensive dining room group appeared as his best product rather than the office armchair. The owner’s best product was selected according to its visual and craft based values. However, his son’s selection criteria for the

best product were the neutrality of the products which allowed it to conform to any style and its ease of production. It may be concluded that this difference in their best product selection exhibited the conflicting objectives and habitus of these two distinct actors. These conflicting objectives also affected the determination of the differentiation strategy of the company. Their different cultural (educational), social and symbolic capitals may be regarded as the factors which determine these differences.

After the graduation of the owner's son, the company employed professional designers for product development and contract projects. It was the son who broke the traditional business perception and brought his cultural (educational), social and symbolic capital into the company structure. His attempt to change organizational structure of the company may be associated with the subversive strategy of Bourdieu. In subversive strategy, the owner's son may be considered as a new comer and he attempted to change the rules of the game which was established by his father and to gain a better position. However the company could not continue to practice in this way. The reason may be considered as the tension between the owner and his son resulted from the owner's and his son's distinct capitals and habitus although it was the owner who encouraged his son to be an industrial designer. When the interviews conducted, the owner and his son owned and managed different businesses. However when there was a need they contributed each other with their different kinds of capitals.

Instead of continual new product development, the owner preferred to develop new products when the consumers of the company demands new staffs. The marketing research of the company was executed by the owner. He communicated with the consumers and gathered all knowledge related to the demands of them.

"It usually somewhat defined according to the needs or desires of the consumers, I mean, the consumers themselves try to describe something. He/she say that I want this kind of stuff rather than that kind of. Then, you examine and you observe similar demands from a couple of clients. Then, you design and develop stuffs according to the consumers' demands."

(Owner of Company C)
(See Appendix E/ Q8)

According to the demands of the consumers, the new products were developed in radical or incremental ways. The new product development processes of the company was divided between the owner and his son, when there was a need to develop modern furniture, the son of the owner was responsible for development of the product in modern style. The development processes of the other products by which the company won its reputation in the past were conducted by the owner. This division of task may be interpreted as that the radical product development was assigned to the owner's son who has the cultural capital which allow more professional approach and the incremental product development was assigned to the owner who has the symbolic capital because of his past practices for conducting silent design. This dual structure also affect the types of the design expertise within the firm, while the owner executed silent design, his son developed some products as if an external designer of the company.

Although there were conflicting approaches and objectives it was observed that both of the interviewees in Company C were agreed that the company was a well known firm and they should preserve its position within the furniture production field. Design was one of the strategies which its main functions were to differentiate and stylize company's products and to add value to them by this way (Heskett, 1999). Hence, it may be concluded that the company incorporated design into its product development process with "business identity motivated strategy". However, when we consider that the company also developed new products according to the demands of the consumers, "the consumer driven design strategy" may be regarded as the second strategy for the incorporation of design into new product development process.

In the entrance hall of the management office of the factory building of **Company D**, two of the company's early products, a chair and a coffee table which were forty years old, were exhibited as an evidence of the stableness of the company. They also represented both the company's history and main objectives which were still valid in spite of the changes in the scale and structure of the firm. Actually, the main objectives of the company also could be easily observed

throughout the interviews within the company. The owner's selection was the company's first office table with metal-tube legs, The production manager selected the first economic office system suitable for small spaces and the employee interviewed as the designer who was also responsible for R&D the newest office group developed by a foreign design team because, according to him, it was the most modern office group of the company.

All of the three interviewees' selection criteria were based on the symbolic values of the selected products. However none of the interviewees described diversity of these products with reference to the external products which were in the market, all of the selected products compared with the products in the company's product range. However this internal differentiation strategy should be considered as similar to Boddy's (2005) differentiation based management strategy. Although differentiation based management strategy seemed the only strategy within the organizational structure of the company, the cost-leadership strategy also applied to the some of the processes in order to maximize productivity and minimize costs.

Company D had a reputation based on the quality of its products and trustworthiness which can be regarded as company's symbolic capital. Actually, the exhibited old products were symbolizing these objectives. Their stableness implied both their quality and trustworthiness of the company. Hence the identity of the company gained by producing valued products was the most important motivation for incorporating design into the development processes in which the main function of design was to add value to the products (Heskett, 1999). This motivation may be interpreted as similar to Bryson's and Rusten's "business identity driven strategy". Nevertheless, the company incorporated design not only for maintaining its reputation but also for contract projects. Consequently "the consumer driven design strategy" should be considered as coexisting strategy.

When both of the management strategies of the company were considered with reference to the Boddy's visualization of "the relationship between strategies and structural models in organizations" in Figure.2.5 in Chapter.2, the company's structure was overlapped with the matrix structure in which the functional and

divisional structures coexist. The coexisting strategies and structures may allow being more flexible, yet it may also cause some inconsistencies.

As mentioned in previous sections, although Company D had the most complex organizational structure among the cases, the management of the company could not establish a stable design department. Although the owner of the company did not mention any reason for the instability in design department, this might be resulted from the cultural patterns which were constructed by the dominant actors in the product development processes in the company. During the interviews the owner couple of times mentioned that a designer should be participated actively to the all phases of product development process, especially to the production phase. When the external designers were discussed, the interviewees did not refer their production related knowledge because of their symbolic capital. However, all of the interviewees implied that the former internal designers did not have adequate production related knowledge.

Since the management of Company D could not employ any long term internal designer, the design phases of the product development processes were continued by both professional external design expertise and silent design as mentioned in previous sections related to the company. While the radical product developments were mostly conducted by the external designers, the silent design was the common application for incremental product development processes in the firm. The company continuously developed new products whether incrementally or radically.

The owner of the company participated all phases of product development process, actually, except the products which were developed for contract projects, in the initiation phases such as idea generation, he was the only actor. Although the dominance of the owner, the R&D unit was the most dominant department in the product development process because the present employee responsible for R&D was the only person who provided communication between the production unit and the external designers however his strength did not come only from this communication duty, he was also the oldest employee related to the product development processes. Consequently, although his cultural (educational) capital

was based on forest industry engineering, he gathered all of the knowledge related to the materials and all design and technical processes related solutions for seven years in the company.

Company E was the only case which had an internal professional designer within its organization. The designer of the company was an industrial designer and her dominance in the company could be easily observed through the activities of the company. Although the owners changed the structure and scope of the activity of the company in the past in order to produce in good quality products, the main objectives of the company were focused on also producing distinct products since the time when the successful outcomes of the relatively radical practices of the designer were appeared. She applied Bourdieu's subversive strategy in order to gain better position in the company, she changed whole company image from its logo to the style of its product range.

However, one of the partners, the general manager implied that producing so distinct and in good quality products may not be the correct way for surviving in the latest conditions. It may be concluded from the statement of him that there was a tension between the product development team and the top management. The top management wanted to resist her attempt to change the rules of the game. Actually, if the management of the company did not allow the designer to act freely, the products developed by her would not be realized. Nevertheless, the design perception of the production manager made it possible. According to him the contribution of design is not limited only within the visual details of a product, but also it unifies all details of a product. The production manager who was also one of the owners was the other effective actor in the product development processes. None of the owners of the company except him participated to the product development processes until the post-prototyping process. The development process of a product from idea generation to prototyping was conducted by the production manager and the designer.

The production manager's and the designer's selection criteria for the most successful product of the company were based on the distinction of the products. One of these products selected by the owner-production manager was rewarded

with a prize in a national furniture fair in 2006 because of its distinct details and design. Consequently, although there was a tension between the top management which approved the cost-leadership management strategy and the product development team, the company was managed by differentiation based strategy. The company's management strategy was also contributed by the open system based organizational culture of the firm as mentioned in the previous section.

When the company's product range was examined it was observed that there existed both the original and improved anonymous products and this may be associated with the mix of radical and incremental product development strategies. As mentioned above the company won a prize in 2006 in a national furniture fair with a bedroom group and it was turned into a motivation for incorporating design into the product development process of the company. Intensification of design in the product development process of the company may be interpreted as one of the strategies of the company similar to "the product driven strategy. However, the effort for incorporating design did not start with this prize. The company tried to integrate design practice into the structure of the firm in the past in order to establish and maintain a design intensive identity of the company since the foundation date and this may be associated with "business identity motivated strategy". Consequently, the main functions of design within the product development process were to generate new product concepts and to differentiate products.

Similar to the other cases, the main objectives of **Company F** were based on developing and producing distinct and in good quality products. However their approach was different from the others. In the other seven cases, almost all of the decisions related to the product development were taken by the owners and they participated to the all new product development processes, nevertheless, at least for some of their products, they preferred to employ or commission designers whether professional or not. On the contrary, all of the products of the company were developed without a designer's contribution. The apt of the owners to not commission or employ any designer was not turned into an obstacle for the company for being managed by differentiation based strategies.

The importance of the distinction within the company culture was appeared through the selection criteria of the interviewees for the most successful products of the company, all of the selection criteria were based on the distinctive characters of the products.

“Design is the most important issue. I mean, it is the distinctiveness which may turn a firm into a brand. No matter how much you advertise, all of them could be wasted unless the distinctiveness exists. I mean, people see you, yes, they could notice you, but they would think and say that “here, it looks like that one” or “like the one produced by that firm” because they cannot distinguish you from others. There should be a design, which they could not say “it looks like that”, which would reveal the difference. It is that, in a short time and with a bit advertisement, which turned our firm into a brand. It is the distinction, the distinct designs, which increase our recognizability.”

(One of the partners of Company F who responsible for design)

(See Appendix E/ Q9)

Although there was not any professional designer, silent design was one of the most important practices in the product development process because of the distinction based management understanding of the owners. Almost all of the phases of the product development processes were conducted by informal ways by the owner who was responsible for design; however the initial decisions for the new products were taken by the other owner who had the largest share of the firm.

The company's product development strategies contained both radical and incremental product development, besides its original product, the company also developed some products by improving existing products in the market. When the company's product range and image was analyzed, it was observed that the fashion consciousness was the most prominent feature. The management offices of the company were decorated in accordance with the company's identity. The younger partner was interested in current trends and fashion and followed the international furniture related fairs. Hence, the company's strategy for incorporating design into its product development process may be considered as similar with “fashion driven strategy”. As a consequence of this motivation, the main function of design for the management of the company was to develop new concepts compatible with the new trends.

In **Company G**, there existed a quality and craft based product development and production tradition. Since the foundation date of the company, the main objectives of the top management of the firm were based on this tradition. Actually, there were some attempts in order to differentiate the products of the company in the past; however they were limited within the inspirations from the historical buildings, etc. The owner interviewed made his selection of the most successful product of the company based on the past tradition of the company. The owner mentioned that he and his brother wished to develop distinct products and to turn it into one of the main objectives of the firm. However he also added that there were limited possibilities to develop distinct furniture because of the nature of the furniture production.

“As in what I said previously, I mean, we also want not to produce imitated stuffs and want to design each of our products, some kinds of stuffs. However, there is a fact of the matter that we appreciate form of arm of an armchair, its form of cushion, its back. Eventually, I mean, you can not differentiate them, I mean you cannot turned its back into more distinct form.”

(Owner of Company G)
(See Appendix E/ Q10)

The company had a reputation as the producer of some well known furniture and its existing social and symbolic capitals were based on this reputation. However the changing conditions in the market treated the position of the company. In order to preserve the capitals obtained through years, the owners decided to focus on design in order to add value to the products of the company and changed the style of the company. Consequently, it may be concluded that the owners of the company adopted the “business identity motivated strategy”.

The product development strategy of the company contained both radical and incremental product developments. The determination of the need for the new products whether radical or not was made by the owner. Actually, the determination phase was not triggered mostly by the appearance of a need. The owner periodically visited almost all of the international furniture fairs and analyzed interior design magazines, and then he determined a new product which should be compatible with the current trends. After the determination phase, the

external designer was informed about the new product and its concept, invited to the product development process, and then he prepared the sketches. However his duty was limited within the preparation of sketches and application of the demanded changes on the sketches, other activities in the product development process were conducted only by the owner.

“In the development processes of our products, we make maximum contribution as the owners and our employees make minimum contribution. Consequently, since this company has a style and it is determined by us, we design them in accordance with our style and taste and then give them to production unit. I mean, it is the way we work in general.”

(Owner of Company G)
(See Appendix E/ Q11)

Actually, the owners' dominance in the product development process may be interpreted as the indicator of their unchanged traditional approaches turned into an obstacle for dividing tasks and responsibilities. According to the owner, the objectives of the company could be understood only by him and his brother because they determined all of these objectives during the establishment period of the firm.

Company H was the only firm in which there was not the possibility to conduct an interview with the owner. Consequently, the main objectives of the company could be concluded from the other interviews which were conducted with the employee responsible for design and the production manager. The two interviewees' selection criteria for the most successful products of the company exhibited differences. The employee who was responsible for design selected a cupboard which looked like a contrabass. On the contrary, the production manager selected a bedroom group which had labor intensive and craft based details. Although there were differences between the interviewees' approaches for differentiating a product the main objectives of the company were interpreted as to produce labor intensive and distinct products. Thus it may be concluded that the company was managed based on the differentiation strategy.

When the development processes of these selected products were compared, it may be concluded that there were conflicting approaches between these two

active actors of the product development process to differentiate a product. While for the employee responsible for design the visual characteristics were the most important factors, the production manager emphasized on the complexity of the product. Actually these conflicting approaches were also interpreted as the reflection of the changing organizational structure and the culture of the firm.

“Unfortunately, they are not so frequently. In the past, we met more frequently than today but the situation is changed. I mean, there are some negligence in those principles. Consequently, there are hardly those kinds of frequent meetings, we meet only when the circumstances require it.”

(Production manager of Company H)
(See Appendix E/ Q12)

The difference between the past and existing structures and professionalization levels may be interpreted as the indicator of the changing interests of the owner.

Although, as a consequence of these changes, the position and effects of the actors were changed, the dominance of the owner could be easily observed as in the other cases. All decisions in the company and also in the new product development processes were taken by the owner. It was the owner who decided which products should be developed and when. The company’s product range included both genius products and improved products which existed in the market and it may be interpreted as the reflection of the company’s product development strategy which was based on both incremental and radical product development. The products developed by an architect who was commissioned by the company as the external designer in the past were registered.

Similar to the majority of the interviewed companies, adopted strategy of Company H for incorporating design into the product development process may be regarded as similar to “business identity motivated strategy” because the company focused on preserving the existing position of the company in the furniture production field. The company’s main objectives by which the existing position of the company established determined the main function of design within the product development process, it should differentiate the products and to create new concepts according to the management of the company.

5.3. Discussion

When all of the cases' organizational structures considered, the dominance of the traditional hierarchy was easily observed. The most effective actors in the firms were the owners and almost all of the main decisions were taken by them. Consequently all practices were executed under the dominance of the owners.

Table.5.4.The most effective actors in the phases of development processes

firm	Identification of the need	concept development	design	Production	Launch
A	Owner and P. Man. as designer	Owner and Pr. Man. as designer	Owner and Pr. Man. as designer	Owner And Pr. Man.	Owner and Marketing
B	Owner	Owner, Pr. Man., E.P. Designer	Owner, Pr. Man., E.P. Designer	Owner, Pr. Man., E.P. Designer	Owner, Pr. Man., E.P. Designer
		Owner and Pr. Man. as designer	Owner and Pr. Man. as designer	Owner and Pr. Man.	Owner and Marketing
C	Owner	Owner	Owner	Owner	Owner
		Owner's son as designer	Owner's son as designer		
D	Owner	Owner, R&D. Man., E.P: Designer	Owner, R&D. Man., E.P: Designer	Owner, R&D. Man., E.P: Designer	Owner and Marketing
		Owner, R&D Man. as designer	Owner, R&D Man. as designer	Owner, R&D Man. as designer Pr. Man.	
E	Owner, I.P. Designer	Owner, I.P. Designer	Owner, I.P. Designer	Owner, I.P. Designer	Owner and Marketing
F	Owner	Owner	Owner	Owner	Owner
G	Owner	Owner and E. P. designer	Owner	Owner	Owner
H	Owner	Owner Np. Designer	Owner, Np. Designer Pr. Man.	Owner, Np. Designer Pr. Man.	Owner Marketing

E. P. Designer: External Professional Designer
 I. P. Designer: Internal Professional Designer
 Np. Designer: Non-professional Designer
 Pr. Man.: Production Manager
 R&D Manager: Research and Development Manager

As suggested by Broom, Longnecker and Moore (1983), the dominance of the owners should be given up when the practices in a company begin to be more complex. In order to cope with the complexity, the organizational structure of a company also should be changed according to the changing needs of developing

company. However, in the examined cases, no matter what kinds of ownerships were there, the owners insisted on maintaining their early structures. As a consequence of their habitus, they intentionally continued to function as at least partially traditional firm and to resist going beyond their forms thus all internal power was remained in their hands. Actually, the tendency of the owner to maintain his organization's basic form was mentioned as a common characteristic of low-tech and small and medium scale companies by Scott (2000).

Surprisingly, in the cases, the central position of design did not determine the position of the designer. In this respect, the above mentioned common characteristic of low-tech small and medium scale companies should be considered as one of the most effective factors which determine the position of the designer within the organizational structure of the companies.

However, the owners' tendencies, as the determinants of the cases' common characteristics, for maintaining their companies as informal or semi-formal organizations and resisting to professionalize all functions in their firms may result from their excessive involvement into every function in their business.

CHAPTER 6

CONCLUSION

In the early sections of thesis, it is stated that the main aim of the study is to contribute to the formation of effective policies by exploring the present ways of practicing and resulting perceptions of the design process and the designer in low-tech small and medium scale furniture industry in Turkey and by also providing systematic information and data on this issue.

With this aim in mind, a number of questions were raised to explore the present ways of practicing and resulting perceptions of the design process and the designers in low-tech small and medium scale furniture industry. Perhaps the most important of them was related to the differing position of the designer and design process within the new product development process of the firms. With regard to this question a special emphasis was placed on the perception of actors involved in the product development process.

Therefore, the case study is concentrated on a number of low-tech small and medium-scale firms in Ankara to analyze the changing and differing position of design and designers in the product development process.

It is argued that on the one hand changes taking place in the position of design and designers in the product development process depend on the changing division of labor and improvements in the technological process. Diversification of task and increasing division of labor create a pressure for the emergence and consolidation of new professions. Consequently technological change and advances open up new paths for the developing professions. On the other hand, such changes are not simply a direct result of technological changes and improvements. In addition to such changes, the conflicts between different actors involved in the production process plays a key role in shaping the positioning of

designers and design process in firms and often such conflicts are shaped by cultural factors such as perceptions of the actors involved in such processes.

In such a study like in this thesis, it is important to make a distinction between the small and large scale firms as their organizational structure and cultures are highly different. Therefore organizational theory is employed to understand the organizational structure and culture of small and medium scale firms as the organizational structure related features such as size, decision making processes, and division of work make a difference on the positioning of design and designer in a firm. It has been seen that smaller organizations like the firms focused on in the thesis are in most cases, as opposed to large firms, unplanned as a result of limited staff and resources and they require flexibility in order to cope with management and task problems. In a similar way, small organizations are also more informal which is dominated by undocumented relationships. Their structures are often more centralized than large scale firms due to the fact that all important decisions are taken by top management often represented by the owner.

Given this structure, institutionalization of the position of design and designers are highly different in small scale firms compared to the large scales ones. Besides organizational structure related features, different components of organizational culture also make a difference on the position of design and the designer. The ways the actors should behave and the staff should run things are determined by components of organizational culture, practices, customs, beliefs and values. To analyze these dimensions, Bourdieu's theory of field is used and the firms are attempted to analyze as a field. A firm as a field consists of positions and networks of relations among these positions as shown in Figure.6.1. There is a power asymmetry among these positions as each position hold different forms and degree of capital. Some positions such as owners of the firm requires considerable degree of economic capital as well as the social capital whereas a designer holds a degree of cultural (informational) capital whereas she/he does not necessarily have a great deal of economic capital. If we use the analogy of game, each actor including the designer takes part in the game to improve her/his position and increase the capital she/he holds. This requires an awareness of the

play of all actors in the field. Players learn from their experience about what is possible, what can be negotiable and how certain rules can be manipulated.

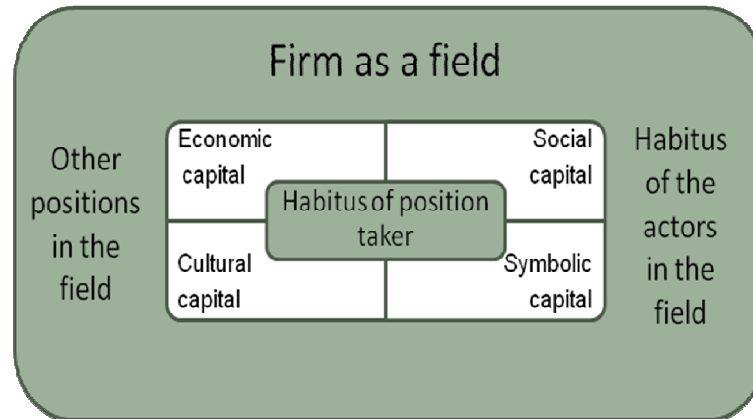


Figure.6.1 Firm as a field and the actors as position takers

Following such reasoning it is argued that cultural factors play an important role in determining the position of design and designers in a firm and employed the term habitus to capture such factors and practices. By employing such a perspective, it is possible to define the competitiveness of a furniture firm in the wider field of furniture production in terms of deployment of different forms of capital accumulated in the firm to get a better position within the field of furniture production (Figure.6.2.). From such a perspective it is important to make use of the cultural (informational) capital of the designer resulting from his/her educational career as well as the experiences in the workplace. What this thesis has shown is that although such a deployment is important for the firm, in many cases such a use of designer and design process has hardly been achieved.

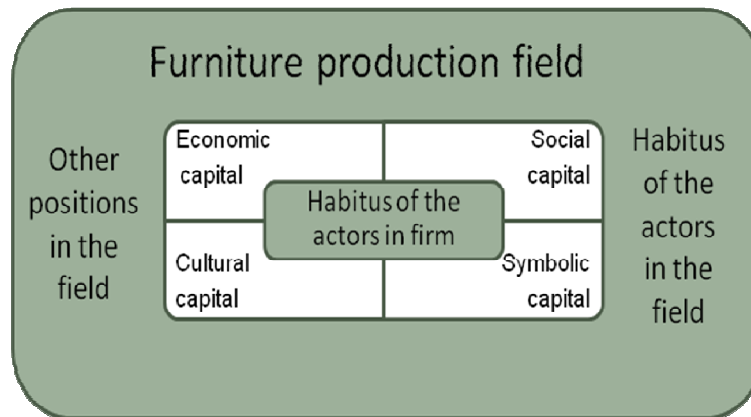


Figure.6.2 Furniture production field and firm as position taker

Then it is important to make some points on the policy dimension by drawing upon the findings of the thesis. A policy in this area should focus on both the improving the position of the design and designers in such firms and also improve the competitiveness of the small and medium scale firms by doing this. This thesis paid more attention to the strategies of firms with regard to their positioning of design and designers in the product development processes. First these strategies will be evaluated. Although this thesis did not pay much attention to the strategies of designers and position of the design profession and education, some attention will be paid to this dimension after the discussion of the former dimension.

6.1. Position of design and the designer

One of the important findings of the research is that most firms implicitly or explicitly make a distinction between the design process and the designer. It is important to make such distinction because almost all firms inevitably lay an emphasis on the design process. However this does not lead them automatically to appreciate the role of industrial designers. In other words, it may be concluded that the management of some firms do not identify the designers as the indispensable actor for the design process. In most cases, the owners of small and medium scale firms take part in product development process and design

phase regardless of the availability of designer as well as other responsible personnel. This kind of inclination may be interpreted as a part of habitus of the owners.

Although all analyzed cases appreciate design as the key activity in product development process, their main expectations from design vary. Actually, different kinds of contributions of design may coexist in expectations of companies, nevertheless, usually, some functions of design are considered more important, in line with the objectives of the firms, organizational cultures and management strategies. The cases' expectations from design as a practice in product development process are classified under three main titles namely:

- 1.Design adding value to both product and company's image
- 2.Design as a practice maximizing productivity and minimizing cost
- 3.Design as a practice differentiating a product incrementally

Design adding value to both product and company's image:

Two out of the eight cases, Company B, and Company E, considered design as a practice which should add perceived value to a product or a service and enhance the company's present and future image. The companies which compete based on non-price value can be considered within this category. Value creation by design is not limited within the product itself; design also creates value for companies' identities, brands and organizational cultures. The companies in this category are managed by mostly differentiation based strategies and they prefer mostly radical product development strategy besides incremental. The business identity motivated and the product driven strategies are commonly used for incorporating design into organizational structures. Since design should have influence on value, image and process, required capital should not be limited within the technical aspects of product development, it also should contain visualization, aesthetics and functionality based knowledge. However, in some cases, cultural capital is not the only effective factor on value and image but also it is the symbolic capital which can be deployed in order to enhance image of both product and company.

Design as a practice maximizing productivity and minimizing cost;

The other two of the eight cases, Company A and Company D, identified design as a practice which should focus on maximizing productivity and minimizing the cost of the companies which focused on these aspects of design concentrated on production related details which should be compatible with their technological infrastructure. Their production techniques may be relatively higher than other cases and their management policies are based on cost leadership. In this category, design is expected to influence production level and companies' ways of incorporation of design is based on process-driven strategies. Consequently, product development process of this kind of companies is based on incremental strategies. The most important cultural capital is related to optimization, production and capacity related problem solving. In some cases, besides process and price based strategies, differentiation based strategies are also used in product development process and design.

Design as a practice differentiating a product incrementally;

Four of the eight cases, Company C, Company F, Company G and Company H, perceived design as a practice which should differentiate products or services incrementally. In these companies design is positioned in order to enhance functionality and aesthetics of a product within this category. Management strategies are similar to the previous category. However, companies' organizational structures are more traditional and most of them cannot be professionalized. Expected influences of design are related only to basic visual and functional aspects of products. In some cases, as a consequence of traditional management approach, professional designer's cultural capital is not considered as an important asset for product development process and companies mostly rely on silent design.

6.2. The key actors who participate to design practice in new product development process

The companies' design strategies are classified with respect to their main objectives. However, design practice in these companies also exhibit differences with respect to the key actors who participate in the design processes. When the key actors are considered, design process in the cases can be divided into four types.

- 1.Design by an external professional designer and, in some cases, the owner
- 2.Design by the internal professional designer and the owner
- 3.Design by the internal non-professional designer and the owner (silent design)
- 4.Design by the owner

In these categories, except the first, the owner is a key actor who mostly generates ideas, makes all decisions, etc. Therefore, it can be concluded that it is the owner actually who determines the actors of design phase and their role in the product development process according to the expected contributions of design. If the expected contribution requires a knowledge which the owner does not have, she/he invites the internal or external designer who has the related knowledge.

Design by an external professional designer and, in some cases, the owner:

For the companies which may be associated with this category, design is a key activity in product development process; however, these kinds of companies prefer external design resources as part of their management strategy. According to the key actors who can affect organizational culture, the contribution of design is not limited with product related attributes. It should also enhance the image related aspects of a company such as corporate identity, corporate culture and brand. In some cases, as in Company B and Company D, knowledge was not the

only important determinant for positioning an external professional designer, but also symbolic capital of the designer was the other important factor. To commission a star designer may provide a product an extra non-price value which can be appreciated only by a special consumer group. However the owner has to withdraw from design phase of product development process because of the dominant figure of the designer who has a symbolic capital as a star in design field. In Company G which can be considered within this category, the owner believed that the external designer cannot understand the main objectives of the company. Consequently, the owner limited the participation of the external designer in the concept development and design phases of product development process.

Design by the internal professional designer and the owner:

The owner perceives design as an activity which should be executed by an internal professional designer. Similar to the previous category, designer should have knowledge on both product and organization related aspects. In this category, besides her/his cultural capital, the designer also has to acquire symbolic capital in internal processes. In most cases, in spite of her/his symbolic capital which is acquired by developing successful products, the owner cannot give up to participate directly in the design phase as in Company E which will be mentioned below in habitus theory.

Design by the internal non-professional designer and the owner (silent design):

Within this category, design practice is executed by internal available employees who may also have sense of aesthetics. Company H may be considered as the representative of this category. In this company, design practice is not executed by a professional designer in it. The management of the company preferred to employ a woodwork industry engineer as the designer. This may be resulted from the owner's past experiences with designers. As mentioned in previous chapter, professional designers were employed by the management of the company but the company could not hold them up.

Design by the owner:

In Company C and Company F, the owners are the designers. Limited resources can be considered as one of the reasons for these kinds of inclinations but in the examined cases, it is seen that it cannot be explained by limited resources as mentioned below.

When the companies' preferred design strategies are associated with key actors who participate in the design processes in the companies, it can be seen that each type of design strategy contains particular types of participant based design (Table.6.1.).

Table.6.1.The companies design strategies and key actors in design process

	Design adding value to both product and company's image	Design as a practice maximizing productivity and minimizing cost	Design as a practice differentiating products or services incrementally
external professional designer and, in some cases, the owner	B D		G
Design by the internal professional designer and the owner	E		
Design by the internal unprofessional designer and the owner (silent design)		A D	H B
Design by the owner			C F

In the companies that employ design as practice which should add perceived value to a product or a service and enhance the company's present and future image, professional designers were the key actors in design activity.

In the companies that employ design as a practice which should focus on maximizing productivity and minimizing cost, the internal unprofessional designers and the owners were the key actors in design activity. One of them was industrial engineer and the other was forest industry engineer.

In the last type of strategy which employ design as a practice which should differentiate products or services incrementally, two interesting determination can be drawn. First, three out of four kinds of participant based design activities are represented. It is the internal professional designer which was not preferred by the companies which adopted this strategy. Second, the only professional participation allowed in this type of strategy is limited in concept development phase.

When the cases' economic conditions are considered as the potential factor which may determine the owners' dominance, it can be observed that almost all of the cases are in similar conditions, suffering from limited resources which mostly considered as an obstacle to professionalization, is not an evident problem for them. Consequently, if the company's economic condition is well enough not to necessitate the owner's direct involvement in the product development process, the owners' habitus should be taken into account.

6.3. Habitus of the owners as the determinant of the differences between positions of design and the designer

When the owners' habitus are taken into account in order to understand the positions of design and the designer in the product development processes in the cases, three potential explanations directly related to design practice can be deduced;

- In large scale companies, it may be considered that the owners pay attention only to the figures and top management related issues. They are alienated from the processes and the products because of the scale of their firms. However in smaller companies, the owners are involved in almost all processes in their companies, there is no distance between the owners and production processes. The owners observe all activities in almost all processes. Hence this kind of close relationships with the processes and products cannot be given up by the owners. As a consequence, in such

smaller companies the division of labor cannot be carried out adequately, so the designers cannot work independently as well as the other employees.

- The satisfaction of designing a product and seeing it as final product cannot be left to the employees or the designers by the owners.
- Since the design activity is carried out casually for a long time, it is very difficult to admit that there exist design experts and it should be carried out by them.

Besides these three explanations, we should also consider the owners' habitus as the determinants of their ways of decision making which also affect the position of design and the designer in structures of the companies. The appropriation of the cultural capital of the designer requires the firm to use some of its economic capital in the form of payment to the designer. Given the limited economic capital of such small scale firms, then such a deployment requires the decision makers of the firm to believe that professional designer is an indispensable part of the production process in general and design process in particular.

There are various determinants of such a decision making processes. In the first place the case studies have shown that the habitus of the firms' decision makers, who are often the owners, plays an important role in positioning the design and designer in the firm. As mentioned above, the owners in small firms are the most important decision makers due to their economic power. Even if the main source of their power results from their legal ownership, they are also very rich in social capital as they are also at the cross-section of all relations in and around the firm. However, sometimes such a historically strong existence in the firm could be a negative asset for the firms as the historically formed habitus of the owners could be a resistance to the necessary changes brought by the changes in the wider field of furniture production. Our case studies have shown that in some cases the owners are not very keen on bringing in-house designers either professional or unprofessional to the firm as in Company F.

It would however be a mistake to explain the resistance of owners and other decision makers with only their conservative habitus or limited capital they hold.

The case studies show that there are other factors playing part in this reluctance. In most cases it is not the design but the designer who meets some resistance from the established actors including the owners. It can be observed that positions of the designers are occupied by other professionals than the industrial designers in some of the firms as in Company D.

The interviews carried out with the owners showed that in some cases the owners showed a sign of dissatisfaction with the industrial designers in terms of their understanding and diagnosing the expectations of the firms in the field of design. Most complaints result from the gap between the expectation of the consumers and designs delivered by the industrial designers. In such cases, owners often refer to the long term experience and design style of the firm by emphasizing the lack of understanding of this by the designers as in Company G.

In such a case, it is difficult to make a distinction between the design taste of the consumers of the firm and that of the owners. However one thing is clear that there is in such cases a clash between the designer and the owner in terms of understanding and conceptualization of the firm's design style. In such cases, it is possible to talk about the differences between the habitus of both parties and this brings us to the type of cultural capital the designer holds and the habitus she/he forms in the process of university education.

It would not be unfair to argue that university education in the field of industrial design and particularly the curricula are designed to suit the large scale modern firms where division of labor is well established and the position of design and designer is clearly identified. Likewise, the type of design preferred in the university education mostly targets the modern consumers. When we look at the firms, most of them are small scale and division of labor is not clear. In such cases, designers who are especially young graduates do not have the necessary means to handle such complexity. Likewise, they are not well equipped to handle the type of design demanded by the traditional consumers and the owners of the firms.

So far the strategies of firms towards the design and the designers have been considered. However, it is also important to look at the very same process from

the designers' and design profession's point of views. The main claim is that in Turkey like in many other countries, industrial design profession and design education have been formed and structured with reference to the product development processes of large scale firms which assume advanced division of labor, well defined tasks, and documented and formal relations. In most cases, the opposite situation of the smaller firms in which informal and undocumented organizational structures exist are seen as an anomaly and a transitory stage to more formal and professional organizational structure. It is expected that these firms would develop themselves by applying a more design friendly strategy. It can be observed that while some of these firms would evolve in this direction, most of the small scale firms are going to be little moved and design and the designers will continue to have a problematic status within the product development process.

In fact, besides design discipline, in some universities and institutions, design management related programs have been initiated in recent years. However, like industrial design education, these programs are focused on the management of design process in high-tech or large scale industries.

It is argued that there is a need to rethinking the design education and related disciplines especially with reference to the medium and small scale production firms. However it is equally true that there is a need to increase the design sensitivity and awareness of those who are involved in the production process by providing some small scale training schemes. Through this kind of policies, as mentioned above, the actors who are involved in the product development and design process and especially the decision makers would be informed about the positive effects of professional design practices on product development processes, organizational structure and culture and image of their companies. In some countries as part of design related governmental policies, this kind of schemes have been developed for and carried out with small and medium scale companies.

However, this kind of schemes should not be limited with only narrating the benefits of design practice or to encourage the companies to incorporate design

into their product development process by using design related success stories. As observed in the literature review and the interviews conducted with the cases, the most common problem related to professionalization of internal practices in low-tech small and medium scale companies is their informal structure and traditional attitudes towards practices.

It should be taken into account that there is not a common best practice. As observed in the case studies, although, some common characteristics exist among the companies, each company differs in many respects. Therefore, through this kind of schemes, the way of incorporating design into each company should be developed according to its organizational structure and culture, long-term production experiences and positions of actors. Consequently, the professional designers who would execute design practice through the scheme should be equipped to understand the positions of the actors and the way in which product development process is working as well as expectations from design in small and medium scale furniture producers. Through this kind of guided professional design practice, the actors experiencing professional design practice through the product development process would develop awareness such that;

- Although developing products through silent design when the companies' resources are limited seems like a solution for product development process, silent design is a short-term and inefficient strategy.
- Knowledge is turned into one of the most important asset in industry. Therefore design should be practiced professionally and turned into codified knowledge in order to use for developing long-term design strategies and share it with other actors in the companies.
- In case that, companies have limited economic resources, design expertise can be acquired as an external resource for a short time rather than investing economic capital for a long term.

However it is hard to say that these kinds of strategies will solve all of the problems related to position of design and designer in low-tech small and medium scale furniture industry in Turkey. Similar to the process of habitus formation of the actors, the transformation of traditional and informal design practices into professional processes by changing the rules of the field may take long time and it may produce unintended results.

6.4. Recommendations for further studies

Throughout the thesis, a considerable emphasis is placed on cultural factors in the production domain which effect the perception of design and designers by the firms. Likewise although it remained outside the scope of this study, the cultural factors in designer domain which largely determine the designer's perception of production domain and the practices require a similar attention in a further study, It is obvious that cultural factors are also at play on the designer's side and it is important to explore the habitus and other cultural features of designers.

Another important subject which should be analyzed from a similar perspective is the micro furniture producers' perception of design and the designer. The number of micro enterprises in furniture industry in Turkey is very significant, however, they need to be equipped with the tools which will provide them with the ability to improve or maintain their position in furniture production field and design may be the most important tool for them. Therefore such an issue remains to be explored by the further studies.

REFERENCES

1. Albaladejo, M., Romijn, H., 2000. Determinants of Innovation Capability in Small UK Firms: An Empirical Analysis, WP 00. 13. ECIS. Technische Universiteit Eindhoven, Eindhoven.
2. Baudrillard, J, 1998. *Selected Writings*. Ed. Mark Poster. Stanford, California: Stanford University Press
3. Boddy, D., 2005. *Management: an introduction*, Essex: FT: Prentice Hall
4. Bonsiepe, G., 1995. *Interface: An approach to design*, Jan van Eyck Akademie, Maastricht.
5. Bourdieu, P., 1989. *Distinction*, London: Routledge
6. Bourdieu, P., 1993. *The Field of Cultural Production: Essays on Art and Literature*, ed. Randal Johnson, Cambridge: Polity Press
7. Bourdieu, P., 1993(2). *Sociology in Question*, London: Sage
8. Bourdieu, P., 2005. "The political field, the social science field, and the journalistic field"; In *Bourdieu and the journalistic field*, ed. Rodney Benson and Erik Neveu, 29-47, Cambridge: Polity Press
9. Broom, N. H., Longenecker, J. G. and Carlos W. Moore, 1983. *Small Business Management*, Cincinnati, Ohio: South-Western Publishing Co.
10. Bruce, M. and Morris, B., 1995. Approaches to Design Management in the Product Development Process, In *Product Development: Meeting the Challenge of the Design–marketing Interface*, ed. M. Bruce and W.G. Biemans, 99-116, Wiley: New York
11. Bruce, M. and Wim G. Biemans, 1995. Introduction: The Role of Marketing in Product Development, In *Product Development: Meeting the Challenge of the Design–marketing Interface*, ed. M. Bruce and W.G. Biemans, 1-9, Wiley: New York

12. Bryson, J.R., Daniels, P.W. and Rusten, G., 2005. *Design Workshops of the World: The Production and Integration of Industrial Design Expertise into the Product Development and Manufacturing Process in Norway and the United Kingdom Institute for Research in Economics and Business Administration* , Bergen - Report A53/04
13. Borja De Mozota, B., 2002. 'Design and competitive edge: a model for design management excellence in European SMEs', *Design Management Journal Academic Review* 2 (1): 88–104.
14. OAIB, 2006. *Orta Anadolu İhracatçı Birlikleri Mobilya Değerlendirme Raporu*. Ankara: Türkiye Ticaret Odaları ve Sanayi Odaları Birliği
15. Calhoun, C., 2003. "Pierre Bourdieu"; In *The Blackwell Companion to Major Contemporary Social Theorists*, ed. George Ritzer, 274-309, Oxford: Blackwell
16. Callaghan, G., 2005. Accessing Habitus: Relating structure and agency through focus group research, *Sociological Research Online* 20 (3)
17. Clegg, S., Kornberger, M. and Tyrone Pitsis, 2005. *Managing and organizations: An introduction to theory and practice*, London: Sage
18. Chrisman, J.J.; Chua, J.H.; Zahra, S.A., 2003. Creating wealth in family firms through managing resources: Comments and extensions, *Entrepreneurship Theory & Practice* 27:359-366
19. Ekberg, K, 2005. *Design investments in small wood manufacturing companies; problems and possibilities of using design expertise in product development*, licentiate thesis, Lulea University of Technology, Department of Human Work Sciences, Division of Industrial Design.
20. Elliot, J., 2006. *Using narrative in social research: qualitative and quantitative approaches*. London, Sage
21. Er, A., 1996. Development Patterns of Industrial Design in the Third World: A Conceptual Model for Newly Industrialized Countries, *Journal of Design History* 10(3):293-307
22. Er, A and T. Çırpanlı, 2004. 1900-2000 Yılları arasındaki değişim sürecinde yerel mobilya sanayinin gelişimi, paper presented at ITU III. Ulusal Tasarım Kongresi; Türkiyede tasarımı tartışmak, June 270-278, in İstanbul, Turkey

23. Hertenstein, J.H., Platt, M.B. and R.W. Veryzer. 2005. The impact of industrial design effectiveness on corporate financial performance. *Journal of Product Innovation Management* 22:3-21

24. Heskett, J. 1998. 'The economic role of industrial design'; In *The role of product design in the post-industrial society*, ed. Tefvik Balcioğlu, 77-92, Metu Faculty of Architecture Press, Kent Institute of Art and Design.

25. Jarvinen J., Koskinen L., 2001. *Industrial Design as a Culturally Reflexive Activity in Manufacturing*, Sitra Report Series, n.15, Publication of the University of Art and Design, Helsinki

26. Gotzsch, J, 1998. Design Orientation in New Product Development; In *Managing New Product Innovation*: ed. Jerrard, B., Trueman, M. and Roger Newport, 38-60, London: Taylor & Francis

27. Johne, F. A., 1995. Evaluating product development success within a business development context, In *Product Development: Meeting the Challenge of the Design–marketing Interface*, ed. M. Bruce and W.G. Biemans, 43–59, New York: Wiley

28. Julier, G., 2000. *The Culture of Design*. London: Sage

29. Julier, G., 2004. The bigger future of European design, PFC 02/03: Eina, Escola de Disseny i Art, Universitat Autònoma de Barcelona, Barcelona

30. Julier, G., 2006. From visual culture to design culture, *Design Issues* 22 (1): 64-76

31. Korkut, F. and G. Hasdoğan, 1997. The profession of industrial design in Turkey: the correspondence between education and practice, IDATER 98, 125-131, Loughborough University

32. Kotler, P. and Rath, G. A. 1984. Design: A powerful but neglected strategic tool, *Journal of Business Strategy*, 5 (2): 16-21

33. Kristensen, T. and Lojaco, G., 2002. Commissioning Design: Evidence from the Furniture Industry. *Technology Analysis & Strategic Management* 14(1): 107-121

34. Kvale, Steinar, 1996. *Interviews: an introduction to qualitative research interviewing*, California, Sage

35. Lemelson-MIT Program, Art Fry and Spencer Silver: Post-it notes *Celebrating invention and innovation: inventor of the week archive*, Massachusetts Institute of Technology, <http://web.mit.edu/invent/iow/frysilver.html>, last visited on November 2008.
36. Leslie, Deborah, and Suzanne Reimer. 2006. Situating Design in the Canadian Household Furniture Industry. *The Canadian Geographer* 50(3): 319-341
37. Malmberg, A. 1997. Industrial geography: location and learning. *Progress in Human Geography* 21(4): 573-582
38. Maskell, P., 1998. Localized low-tech learning in the furniture industry In *Specialization and localized learning: six studies on the European furniture industry*, ed. G. Lojancono and M. Lorenzen, 33-57, Copenhagen Business School, Copenhagen
39. Moingeon, B. and Ramanantsoa, B., 1997. Understanding corporate identity: the French school of thought, *European Journal of Marketing* 31(5/6): 383-395
40. Moultrie, J., Clarkson, P. J. and David Propert, 2005. A tool to evaluate design performance in SMEs, *International journal of productivity and performance management* 55(3/4): 184-216
41. OECD, 2004. *Small and Medium Sized Enterprises in Turkey: Issues and Policies*, OECD, Paris
42. O'Shea, Anthony. 1999. Innovation and product development and Pierre Bourdieu's theory of habitus, capital and field. Paper presented at the Critical Management Conference.
43. O'Regan, N., Sims, M. and Abby Ghobadian, 2005. High performance: ownership and decision-making in SME's, *Management Decision* 43(3): 382-396
44. Özkaraman Şen, M., 2004. 1900-2000 Yılları arasındaki değişim sürecinde yerel mobilya sanayinin gelişimi, paper presented at ITU III. Ulusal Tasarım Kongresi; Türkiyede tasarımı tartışmak, June 270-278, in Istanbul, Turkey
45. Patton, M. Q., 2002. *Qualitative research and evaluation methods*, Thousand Oaks, CA: Sage

46. Perks, H., Cooper, R. and Cassie Jones, 2005. Characterizing the Role of Design in New Product Development: An Empirically Derived Taxonomy, *Journal of Product Innovation Management* 22 (2): 111–127
47. May-Plumlee, T and T. J. Little, 1998. No-interval coherently phased product development model for apparel, *International Journal of Clothing Science and Technology*, 10 (5): 342-364
48. Ritchie, J. and J. Lewis, 2003. *Qualitative research practice: a guide for social science students and researchers*, London, Sage
49. Rusten, G. and J.R. Bryson, 2007. The production and consumption of industrial design expertise by small- and medium- sized firms: some evidence from Norway, *Geografiska Annaler: Series B, Human Geography* 89 (S1): 75–87.
50. Roy, R. and S. Potter, 1990. Managing design projects in small and medium-sized firms, *Technology Analysis & Strategic Management*, 2(3): 321-336
51. Scott, A. J., 1996. The craft, fashion and cultural-products industries of Los Angeles: competitive dynamics and policy dimensions in a multi sectoral image producing complex, *Annals of the Association of American Geographers* 86(2): 306-323
52. Scott, A. J., 2000. *The Cultural Economy of Cities*, London: Sage
53. Scott, A. J., 2006. The changing global geography of low-technology, labor-intensive industry: clothing, footwear, and furniture, *World Development* 34(9): 1517–1536.
54. Schienstock, G. and Hämäläinen, T., 2001. *Transformation of the Finnish Innovation System: A Network Approach* - Sitra Reports series 7 Sitra , Helsinki
55. Slater, Don, 1997 *Consumer Culture and Modernity*, Cambridge: Polity Press
56. Stein, Rolf. 1999. The Restructuring of the Furniture Industry in the New Europe and Regional Development of the German-Polish Border Area. Research project. Frankfurt: European University Viadrina, Chair for Economic and Social Geography.

57. Stoer, S.R. and F. Rodrigues, 2005. Perceptions of health and well-being in transition societies: some results of a qualitative study carried out in the Ukraine, *European Journal of Social Work* 8(2); 182-200
58. Storey, D. J., 1994. *Understanding the Small Business Sector*, Routledge: London
59. Plumlee, T. May and T.J. Little, 1998. No-interval coherently phased product development model for apparel, *International Journal of Clothing Science and Technology* 10(5): 342-364
60. Trueman, M., 1998. Managing innovation by design? How a new design typology may facilitate the product development process in industrial companies and provide a competitive advantage, *European Journal of Innovation Management* 1(1): 44-56.
61. Valtonen, A., 2005. Six decades and six different roles for the industrial designer. Paper presented at the Nordes conference IN THE MAKING, Copenhagen.
62. Walsh, V., Roy, R., Bruce, M. and Stephen Potter, 1992. *Winning by design: Technology, Product design and international competitiveness*, Blackwell: Oxford
63. Webster, L., Mertova, P., 2007. *Using narrative inquiry as a research method*, London: Routledge

APPENDIX A

INTERVIEW QUESTIONS FOR PILOT STUDY

1. AŞAMA

firmanızın ürettiği ürünler içinde en beğendiğiniz yada en başarılı bulduğunuz (satış, medyada yer alma vb. açısından) bir ürünü belirleyip bu ürünün geliştirilme sürecinde sizin tanık olduğunuz kadarı ile ürün geliştirme sürecini anlatırmısınız?

(Bu soru firma sahibine, tasarımcı yada tasarım ekibi sorumlusuna ve üretim sorumlusuna (usta başı) yöneltilecektir.

2. AŞAMA

Ana Sorular ve Görüşme Soruları:

1. Firmanızın ve sizin öykünüzü kısaca anlatırmısınız?
2. Hangi kritik kararlar firmanın rotasını değiştirdi? (firmanın dönüm noktaları)
3. Firmanızın ürün politikasını nasıl tanımlarsınız? Neden?
4. Yeni ürün geliştirme (ürün grubuna yeni bir ürün ekleme) ihtiyacı ne sıklıkta ortaya çıkıyor?
5. Üretmeyi planladığınız ürünü ve onun özelliklerini nasıl belirliyorsunuz?
6. Ürünü belirlerken karar aşamasına hangi birimler katılıyor? Neden?
7. Belirtilen birimlerin karar aşamasına katılımlarını nasıl derecelendirirsiniz? Neden?
8. Nihai karar aşamasında en etkili birim hangisi? Neden?
9. Firmanın organizasyon altyapısının şu anki durumu nedir?
10. Firmanın organizasyon altyapısını hiç değiştirdiniz mi? Bu değişikliklerde hangi faktörler etkili oldu? Neden?
11. Müşteri profilini belirlerken ne tür kriterler kullanıyorsunuz?

12. Hedef kitlenizi radikal bir biçimde değiştirdinizmi (örneğin alt gelir grubu hedef kitlesinden üst gelir grubu hedef kitlesine yada orta yaş hedef kitlesinden genç hedef kitlesine yönelmek gibi)?
13. Bahsettiğimiz radikal değişiklikleri bu güne kadar kaç kez gerçekleştirdiniz? Bu değişiklikleri hangi faktörler etkiledi?
14. Müşteri geri bildirimlerinin yeni ürün geliştirme sürecine etkisi varmı? Varsa nasıl?
15. (Eğer firma tasarımcı ile çalışıyor ise) Tasarımcı ile çalışmaya ne zaman başladınız?
16. Birlikte çalışacağınız tasarımcıyı nasıl belirliyorsunuz?
17. Ürün geliştirme sürecinin hangi aşamasında tasarımcıya başvuruyorsunuz?
18. Organizasyon yapısı içinde tasarımcı hangi hiyerarşik pozisyonu dolduruyor?
19. Tasarım ekibi ve diğer birimler arasında ne tür ilişkilenmeler mevcut?
20. Ürün geliştirme süreci içinde tasarımın ve tasarımcının önemini ve sürece katkısını nasıl tanımlarsınız?
21. Bu güne kadar çalıştığınız tasarımcıların meslekleri nelerdi?
22. Bu tasarımcı(lar) ile çalışma şekliniz nasıldı? (firma içinde tam zamanlı, yarı zamanlı yada dışardan danışmanlık vb.)
23. Bu çalışmalar ne kadar sürdü?
24. Geçmişte ve bugün görevlendirdiğiniz tasarımcıların ürün geliştirme sürecindeki pozisyonlarını nasıl tanımlarsınız? Ne tür farklılıklar söz konusu? Neden?
25. Tasarımcı ile çalışmak size ne tür deneyimler kazandırdı?
26. Firmanızın mevcut stratejileri içinde tasarımı, firma organizasyonu içinde tasarımcıyı konumlandırırken deneyimleriniz sizi nasıl etkiliyor? Bu etkilerin nedenleri nelerdir?
27. Firmanızın ürün geliştirme süreci içinde tasarımı olması gereken şekilde konumlandığınızı düşünüyor musunuz?
28. Mobilya endüstrisi ile doğrudan yada dolaylı olarak ilişkili meslek örgütleri, dernekler ve kuruluşlar ile ne tür ilişkileriniz var?

29. İşbirliđi yaptığınız firmalar var mı? Nasıl?
30. Firmanız için ham yada yarı ham malzeme sađlayan firmalar vb. lerle ne tür ilişkileriniz var?
31. Bu ilişkilerin mobilya endüstrisi ile ilgili yenilikler, teknolojik gelişmeler ve sektörle ilgili diđer bilgilere ulaşmanızda ne tür etkileri var?
32. Firmanızın (Çalıştığınız firmanın) Türk mobilya endüstrisi içindeki yerini nasıl görüyorsunuz, bunda tasarımın etkisi nedir? Hem firma sahibine hem tasarımcı yada tasarım ekibi sorumlusuna yöneltilece

APPENDIX B

INTERVIEW QUESTIONS

1.AŞAMA

firmanızın ürettiği ürünler içinde satış, medyada yer alma vb. açısından en beğendiğiniz yada en başarılı bulduğunuz ve gelişme sürecine tanık olduğunuz bir ürün belirleyebilir misiniz? Bu ürün nasıl geliştirildi? Tanık olduğunuz kadarı ile anlatırmısınız?

2.AŞAMA

Ana Sorular ve Görüşme Soruları:

1. Firmanızın kuruluş ve gelişim öyküsünü kısaca anlatır mısınız?
2. Firmanın organizasyon yapısının şu anki durumu nedir? (Ürün geliştirme ile ilgili hangi birimler mevcut? Bu birimlerin görev tanımları ve hiyerarşik sıralaması nasıl?)
3. Firmanızın; hedef kitle, pazar, üretim vb. açısından ürün politikasını nasıl tanımlarsınız? (bir ürün geliştirirken firma açısından vazgeçilemez kriterler nelerdir?) Neden?
4. Yeni ürün geliştirme (ürün grubuna yeni bir ürün ekleme) ihtiyacı ne sıklıkta ortaya çıkıyor? Yeni ürün geliştirirken ürünü farklılaştırmada ne gibi stratejiler uyguluyorsunuz? (geliştirilmiş en yeni malzemeleri ve/veya o güne kadar kullanılmamış detayları kullanarak tamamen yeni bir ürün tasarlamak, var olan bir ürünü iyileştirip formunu tamamen yeniden tasarlamak, varolan bir ürünün sadece formunu değiştirmek vb.)
5. Üretmeyi planladığınız ürünü ve onun özelliklerini nasıl belirliyorsunuz?
6. Ürünü belirlerken karar aşamasına hangi birimler/kimler katılıyor? Neden?
7. Belirtilen birimlerin karar aşamasına katılımlarını etkilerine göre nasıl sıralarsınız? Neden?
8. Nihai karar aşamasında en etkili birim hangisi? Neden?
9. Ürünlerinizi pazarladığınız yada pazarlamayı planladığınız müşteri profilini nasıl belirliyorsunuz?

10. Hedef kitlenizi radikal bir biçimde değiştirdinizmi (örneğin alt gelir grubu hedef kitlesinden üst gelir grubu hedef kitlesine yada orta yaş hedef kitlesinden genç hedef kitlesine yönelmek gibi)?
11. Müşteriden geri bildirim alıyor musunuz? Bu bildirimlerin yeni ürün geliştirme sürecine etkisi varmı? Varsa nasıl?
12. (Eğer firma tasarımcı ile çalışıyor ise) Tasarımcı ile çalışmaya ne zaman ve hangi ihtiyaçlar nedeni ile başladınız?
13. Birlikte çalışacağınız tasarımcıyı nasıl belirliyorsunuz?
14. Tasarımcı ürün geliştirme sürecinin hangi aşamalarında ve ne şekilde rol oynuyor?
 - a) İhtiyaç belirleme.....
 - b) Konsept geliştirme.....
 - c) Ürün geliştirme ve tasarım.....
 - d) Üretim.....
 - e) Pazara sunma.....

(Percks, Cooper and Jones, 2005)

15. Tasarım ekibi ve diğer birimler arasında ne tür ilişkiler mevcut?
16. Bu güne kadar çalıştığınız tasarımcıların mesleki altyapıları nelerdi?
17. Bu tasarımcı(lar) ile çalışma şekliniz nasıldı? (firma içinde tam zamanlı, yarı zamanlı yada dışardan danışmanlık vb.) Bu çalışmalar ne kadar sürdü? Halen tasarımcılar ile hangi çalışma şeklini tercih ediyorsunuz?
18. Geçmişte ve bugün görevlendirdiğiniz tasarımcıların ürün geliştirme sürecindeki pozisyonlarını karşılaştırdığınızda ne tür farklılıklar söz konusu? Neden?
19. Tasarımcılar ile olan mevcut deneyimleriniz firmanızın tasarım stratejisini ve tasarımcıya yaklaşımını nasıl etkiledi? Neden?
20. Firmanızın meslek örgütleri, kuruluşlar, diğer firmalar ve tedarikçiler ile ilişkileri; sektörle ilgili yenilikler ve teknolojik gelişmelere ulaşmanızda rol oynuyor mu? Nasıl?

Meslek örgütleri:

- Sanayi odası.....
- Türkiye İhracatçılar Birliği.....
- Kosgeb.....
- Omsiad.....
- Ofis Mobilyaları Sanayi ve İş Adamları Derneği
- Taif.....
- Türkiye Ağaç İşleri Esnaf ve Sanatkarları Federasyonu

Amlo.....
Ankara Mobilyacılar ve Lakeciler Odası
Uab.....
Ulusal Ahşap Birliđi
Mosder.....
Mobilya Sanayicileri Derneđi
Mobsad.....
Mobilya Sanayi İş Adamları Derneđi
Mobder.....
Mobilya Sanayicileri İthalat ve İhracatçıları Sosyal Yardımlaşma Derneđi

Kuruluşlar:

Kosgeb.....
Üniversiteler.....
Sanayi Bakanlığı.....
Diđer.....

Diđer firmalar ile işbirliđi.....

Tedarikçiler.....

21. Firmanızın (Çalıştığınız firmanın) Türk mobilya endüstrisi içindeki yerini nasıl görüyorsunuz, bunda tasarımın etkisi nedir? Hem firma sahibine hem tasarımcı yada tasarım ekibi sorumlusuna yöneltilecek.

APPENDIX C

LETTER OF REQUEST

TÜRKİYE'DE ORTA ÖLÇEKLİ MOBİLYA ENDÜSTRİSİNDE ÜRÜN GELİŞTİRME SÜRECİ İÇİNDE TASARIMIN VE TASARIMCININ KONUMU

Sayın Yetkili;

Türkiye'de orta ölçekli mobilya endüstrisinde ürün geliştirme süreci ve bu süreç içinde tasarımın ve tasarımcının konumunu incelemek için yapılacak olan bu araştırma **Orta Doğu Teknik Üniversitesi Endüstri Ürünleri Tasarımı Bölümünde** yürütülmekte olan bir Yüksek Lisans Tezi için kullanılacaktır.

Araştırma **Doç. Dr. Gülay Hasdoğan**'ın tez danışmanlığında, Endüstri Ürünleri Tasarımı Bölümü Yüksek Lisans öğrencisi Mehtap Öztürk Şengül tarafından yürütülmektedir.

Bu araştırmanın amacı farklılaşan rekabet koşullarında, mobilya üreticilerinin tasarım öğesini nasıl kullandıklarını araştırmak ve bir strateji olarak tasarımı daha yaygın kullanmalarını sağlayacak politikalar hazırlanması için gerekli verilere bir katkı sağlamaktır.

Bu araştırma 2 aşamalı olarak yapılması planlanmaktadır;

1. Aşama: firma sahibi, tasarımcı yada tasarım birimi şefi ve üretim sorumlusundan belirledikleri bir ürünün geliştirilme sürecini anlatmaları istenecek.
2. Aşama: firma sahibi ile 21 sorudan oluşan bir görüşme gerçekleştirilecektir.

Eğer kabul edilir ise bu görüşmeler ses kayıt cihazı ile kaydedilecektir.

Bu araştırma sırasında elde edilecek bilgiler firma ve şahıs isimleri gizli tutularak değerlendirilecektir.

Bu araştırmaya yardımcı olacağınızı umar, katkılarınız için şimdiden teşekkür ederiz.

Mehtap Öztürk Şengül
Tel 1 : 0 533 239 57 80
Tel 2 : 0 312 210 67 62
mehtapozturksengul@yahoo.com.tr

APPENDIX D

QOUTATIONS

Q1-“Öyle çok sorunlar var ki aslında, yani şeyi keşke öbür bölümlerde de, bence önce onların hallolması lazım yani üretim şefi, planlama, lojistik, satın alma yani bu çalışmalar yapılıp, önce onları hallederek yani tasarıma çok değer veririm şimdi o ayrı bir şey ama....”

(D firmasının sahibi)

Q2-“... böyle bir çalışmamız şu ana kadar hiç olmadı. Şimdi şöyle bir şeyde var, yani yapabilirizde, yani gerçekten de öyle bir çalışmada yapabiliriz; ama böyle bir ihtiyaç da şu ana kadar çıkmadı yani. Belki de şeyden kaynaklanıyor: şimdi benim ortak var, Ahmet Bey, o da iyidir yani onun da gözü çok iyi, ha biz bu konuda zorlanmıyoruz hiç.”

(F firmasının tasarımdan sorumlu ortağı)

Q3-“Son karar benim oluyor. Çünkü netice itibari ile o ürünün satılmasından ve sergilenmesinden ben sorumlu olacağım. Bu ürünün üretim ve pazarlama riskini ben alıyorum. Yine de son karar bende olsa bile çoğunlukla onların fikrini alıyorum.”

(G firmasının sahibi)

Q4-“İşe başlarken aslında biz çok daha iyi başlamıştık. Burada ODTU mezunu bir tasarımcı arkadaşımız vardı, 1-2 ay ancak kaldı, 2 ay bile kalmadı, sonra gitti. Çizgileride çok güzeldi, oturup tasarımlar yapıyordu fakat başka yerde iş buldu, oraya kaydını tutamadık. Başlarken çizgimiz çok idealdi. O zaman satmasak da çok iyi şeyler yapıyorduk.”

(H firmasının üretim müdürü)

Q5-“Üretim ağırlıklı olduğum için, tasarımda da benim bir alt yapım olduğu için kendim daha ziyade bunları öngörüyorum, ondan sonra tasarımcı profesyonel arkadaşlarımızla tartışıyoruz, onlarla değerlendiriyoruz; ama daha ziyade ben fikir üretiyorum ve bunu bir prototip haline getiriyoruz. Daha sonra üretimdeki arkadaşlar bu ürünü hayata geçiriyor.”

(A firmasının sahibi)

Q6-“Tabii ki her tasarımda üretim birimi zorlanıyor. Bu bir gerçek. Yeni tasarlanan ürün üretim sürecine ne kadar uygun olursa olsun bu böyle. Bu durumda üretim birimi bu tür ürünleri üretmek istemiyor... bir de iç dirençle karşılaşıyorsun. Bu sosyal olarak da insan karakteri olarak da böyle. İnsanlar rutin işlerini yaparken onları düşünmeye zorlayacak ve özellikle başarılı olma garantisi olmayan işlerden kaçınıyor. Onun için önce direnç gösteriyor, böyle bir şey üretilmez diyor. Onun için tasarım ve üretim ilişkisi ile ilgili zihniyetin değişmesi lazım. Yani siz bunu başaramazsanız hiç bir zaman tasarım üretemezsiniz. Onun için Türkiye üretim kültüründe taklit çok revaçtadır. Çünkü kolay ve bizim karakterimize en uygun yol. En verimli ve en rahat üretim tarzı budur. Eğer o üretilip satıyorsa bende aynısını yapabilirim.

(B firmasının sahibi)

Q7-“Aslında şöyle, bizim üretimimiz iki tür tasarım uygulaması üzerine çalışıyor. İlkinde tasarımcının bize bunu yapın dediği ürünleri üretiyoruz. O ben bunu tasarladım, bunu üretin der. İkincisinde, biz en önemli kriter olarak satılabilirliği göz önüne alıyoruz. Bilgi ve fikirleri elde etmek için katalogları ve fuarları kullanıyoruz. Bir de bizden aldıkları ürünler için iyileştirmeler öneren müşterilerimizden gelen feedbackleri kullanıyoruz. Yani, şimdi burda iki tür tasarım kullanımı var. Fakat tasarımcı ile çalışmak pahalı... Tabii, ikincisi daha ekonomik ama burada her zaman risk var.”

(B firmasının üretim müdürü)

Q8-“O genelde birazda müşterinin ihtiyacına veyahut da arzusuna göre şey yapıyor, yani kendisi bir şeyler size anlatmaya çalışıyor. “Ben şöyle şöyle değilde şöyle bir şeyler istiyorum” diyor. Bakıyorsunuz birkaç müşteriden aynı isteği görüyorsanız bu sefer istediği, arzu ettiği şeylere göre bir tasarım yapıp bir şey çıkarıyorsunuz”

(C firmasının sahibi)

Q9-“Tasarım, en önemli konu. Yani bir firmayı zaten markalaştıracak şey farklılıktır, o farklılığı olmadığı sürece ne kadar reklam yaparsan boşa gitmiş olur. Yani, bakar insanlar, evet, senin farkına varırlar; ama seni diğer firmalardan ayırt edemediği için, tasarımları, ürünleri olarak ayırt edemediği için şöyle düşünür; “a işte şunun gibi bir şey”, “şu firma gibi”, der. “bunun gibi” diyemeyeceği, farklılığı ortaya çıkartacak bir tasarım olması gerekiyor. bizi marka, kısa sürede az bir reklamla markalaşmamızı sağlayan şey o, bizi tanınırlığımızı arttıran farklılıklar oldu, farklı tasarımlar oldu.”

(F firmasının tasarımdan sorumlu ortağı)

Q10-“Şimdi dediğim gibi yani işte bizde istiyoruz artık taklit bir şey yapmamayı. Her ürünümüzü kendimiz bir takım şeyler tasarlamayı; ama bir de şu, bir gerçek var, ya netice itibari ile bizim de beğendiğimiz bugün işte bir koltuğun kol yapısıydı, minder yapısıydı, arkasıydı. Ya bunlar netice itibari ile bizimde beğendiğimiz, o gördüğümüz İtalya'daki şeyler, yani çok fazla ayıramıyorsun yani işte ne bileyim sen arkasını çok değişik bir şey yapamıyorsun.”

(G firmasının sahibi)

Q11-“Bu ürünleri geliştirirken firma sahibi olarak biz, şöyle söyleyeyim, daha fazla katkı yapıyoruz, yanımızda çalışan arkadaşlar daha az yapıyor. Çünkü netice itibari ile bu firmanın bir tarzı var, o tarzı da genelde biz kendimiz belirlediğimiz için kendi tarzımıza uygun, bizim zevkimize hitap edecek şekilde onları tasarlıyoruz, imalata veriyoruz. Yani genel anlamda yaptığımız bu.”

(G firmasının sahibi)

Q12-“Rutin değil, maalesef. Biz geçmişte bugüne göre daha rutin diyebileceğimiz toplantılar yapardık fakat değişti. Yani o prensiplerde bir takım tavsamalar oldu. Dolayısıyla şu anda öyle rutin toplantılarımız pek olmuyor ancak işte şartlar zorlayınca toplanıyoruz.

(H firmasının üretim müdürü)