

FACTORS TRIGGERING THE MOTIVATION FOR DESIGN
COLLABORATIONS

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

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN
INDUSTRIAL DESIGN

OCTOBER 2019

Approval of the thesis:

**FACTORS TRIGGERING THE MOTIVATION FOR DESIGN
COLLABORATIONS**

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ABSTRACT

FACTORS TRIGGERING THE MOTIVATION FOR DESIGN COLLABORATIONS

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Doctor of Philosophy, Industrial Design
Supervisor: Assoc. Prof. Dr. Pınar Kaygan

October 2019, 365 pages

This dissertation aims to contribute to a better understanding and effective management of interdisciplinary design collaborations. In order to achieve this, design collaborations are being investigated from a broad perspective assessing actors from product design, product development, product management, marketing, production, purchase and quality departments as the contributors of the process. Additionally, this study draws together two separate bodies of work, namely studies on design collaboration and studies on motivation, suggesting that there is a motivational aspect that affects individual and team performances in creative work.

In search for the factors affecting motivation of actors during collaborative design processes, this research adopts an interpretivist approach. In order to uncover the personal experiences, interviews were done with 25 experts from different disciplines. The data gathered from the interviews were analyzed using template analysis.

Based on the analysis, this dissertation offers four main conclusions. First, this dissertation presents emotional and rational factors that activate the motivation of actors towards both the task and collaboration in design collaborations. Secondly, considering the contribution of actors from diverse disciplines, this dissertation

reveals that motivation towards creating a novel product is not specific to any discipline. Thirdly, this dissertation claims that collaborative design processes can be conceptualized from the motivational perspective with a creative design spiral based on the motivation of actors, which is composed of passion-purpose-product-pleasure. Lastly, this thesis demonstrates the importance of a clearly defined design brief created in a time period required for its preparation on the effective management of collaborative design process.

Keywords: Design, Collaboration, Motivation, Interdisciplinary, Teamwork, Engineering

ÖZ

TASARIM İŞBİRLİKLERİNDE MOTİVASYONU TETİKLEYEN FAKTÖRLER

Özdemir, Keziban Gülen
Doktora, Endüstri Ürünleri Tasarımı
Tez Danışmanı: Doç. Dr. Pınar Kaygan

Ekim 2019, 365 sayfa

Bu tez disiplinler arası tasarım süreçlerinin daha iyi anlaşılmasını ve etkili yönetimini sağlamayı amaçlamaktadır. İlk olarak bu tez, işbirlikçi tasarım süreçlerini ürün tasarımı, ürün geliştirme, ürün yönetimi, pazarlama, üretim, satın alma ve kalite departmanlarından aktörlerin de katılımını içerecek şekilde daha geniş bir bakış açısından incelemektedir. İkinci olarak, iş birliği ve motivasyon konusundaki iki farklı çalışma alanını bir araya getirerek işbirlikçi tasarım süreçlerinde, yaratıcı işlerde bireysel ve takım performansını etkileyen motivasyon boyutu da olduğunu iddia etmektedir.

Disiplinler arası tasarım süreçlerinde aktörlerin iç motivasyonlarını etkileyen faktörleri araştırırken, bu araştırmada yorumlayıcı yaklaşım benimsenmektedir. Dolayısıyla, kişisel deneyimler üzerinden bireylerin, üzerinde çalıştıkları konu ve iş birliğine yönelik motivasyonlarını etkileyen faktörleri keşfetmek için farklı sektörlerde çalışan farklı disiplinlerden 25 kişiyle görüşme yapılmıştır. Görüşmelerden elde edilen veri, şablon analizi yöntemiyle analiz edilmiştir.

Analize dayanarak bu tez dört ana çıktı ortaya koymaktadır. İlk olarak bu tez kişilerin tasarım konusu ve iş birliğine yönelik motivasyonlarını tetikleyen duygusal ve

rasyonel faktörleri ortaya koymaktadır. İkinci olarak bu tez çeşitli disiplinlerden aktörlerin katkısını ele alarak özgün bir ürün ortaya koymak konusundaki motivasyonun disiplinlerden bağımsız olduğunu ortaya koymaktadır. Üçüncü olarak bu tez motivasyonel bakış açısından disiplinler arası tasarım süreçlerinin tutku-amaç-ürün-haz sıralamasını takip eden bir yaratıcı tasarım spirali ile temsil edilebileceğini iddia etmektedir. Son olarak bu tez, hazırlanması için yeterince zaman ayrılmış ve açıkça ifade edilmiş bir tasarım tanımının tasarım sürecinin etkili bir biçimde yönetilmesi üzerindeki önemini göstermektedir.

Anahtar Kelimeler: Tasarım, İşbirliği, Motivasyon, İnterdisipliner, Takım Çalışması, Mühendislik

If you want to build a ship, do not drum up people to collect wood and do not assign them tasks, but rather teach them to long for the endless immensity of the sea.

Antoine de Saint-Exupery

ACKNOWLEDGEMENTS

In the beginning of this journey, I could never imagine how hard it would be to raise a child and a dissertation concurrently. I was so lucky that the whole process progressed with passion, enthusiasm, and curiosity with great support of many precious people surrounding me. Now it is a pleasure for me to say a sincere thank you to all those people.

First and foremost, I would like to offer my deepest gratitude to my supervisor Assoc. Prof. Dr. Pınar Kaygan for her continuous support, guidance, and encouragement in spite of the far distances between us. I could not have imagined carrying out this process with ease without her support whenever I needed it.

Besides my advisor, I would like to thank the rest of my thesis advisory committee: Prof. Dr. Gülay Hasdoğın, and Prof. Dr. Nazlı Wasti Pamuksuz, for their insightful comments and constructive criticisms that motivated me to seek for the right questions and widen my perspective.

I am thankful to my parents, Gülten Göz and Adem Göz, for their belief in me and my work. They are also the most dedicated helpers in my life. I am so lucky to be your daughter.

Lastly, and most importantly, my deepest gratitude goes to my dear husband, Duran Özdemir, and my beloved son Dođu Özdemir, for their unconditional love and support throughout this thesis. It was impossible to complete this thesis without the love and support of my husband even in the most stressful and sleepless days. I am also grateful for the patience of my son to let me work for long hours in front of my computer with short breaks spent playing with him. I feel so lucky that I have you in my life. Thanks for all your encouragement!

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CHAPTER 1

INTRODUCTION

It has been claimed that only one-third of the students who start primary schools now will be working in the occupations that we know today; the rest will be working in emerging occupations (Davidson, 2012). As a result of the change in production practices due to the advanced technologies and globalization, knowledge workers appear to be the primary actors of this century (Drucker, 1999; Karoly, 2004). Knowledge-based economies demand collaborative skills, which have become a prominent competence for the 21st century (Dede, 2010). Moreover, according to a recent World Economic Forum (WEF) report, the change in the demands from the workforce brings about the need for different skills for the employees to thrive in 2020, which are complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, service orientation, negotiation, and cognitive flexibility (WEF, 2016).

It is interesting to realize that these competencies are inherent to design disciplines. Nevertheless, the practice of the industrial design discipline has undergone deep changes in the status of the designer and the conduct of the process. The era of star designers who are capable of creating anything alone was announced to be over in the 1990s (Richardson, 1993), and the need for combining knowledge and skills of different experts in an interdisciplinary collaboration was indicated to be important for contemporary designers (Erlhoff & Marshall, 2008).

As a result of the increasing complexity of the design problems in a global and globalizing world, the scope of knowledge required to solve those complex problems, the intense competition at market, and the need for a decrease in time to market has

been transformed the product design activity from an individual process into a collaborative process (Wang & Oygur, 2010; Hoegl et al., 2004; Kleinsmann et al., 2007; Valkenburg, 2000).

Following up on these discussions, design researchers have started to focus on different aspects of collaborative design. Firstly, research in primarily design management and engineering design domains focuses on the technical aspects of design collaborations in search for systematic methods to conduct the collaborative design process efficiently. Secondly, research on the social aspects of design collaborations mainly focuses on communication between team members. Lastly, team cognition, which interprets collaborative design as a cognitive process, appears to be another aspect that helps understand design collaborations. All these efforts shed light on different aspects of collaborative design process and provide a broad knowledge-base to understand and manage the collaborative design process better.

Turning back to my experience as a lecturer, I observed many times how much the process –both of designing and learning – is being affected by the desire to get involved in that task. The students who really enjoy the task and feel excited to work on a project work eagerly and spent more time dealing with their projects compared to the students who work only for completing a given task. This is in line with current research suggesting that highly intrinsically motivated people tend to apply great cognitive effort to acquire necessary knowledge and skills in the target domain (Amabile 1997; Camerer& Hogarth, 1999). Likewise, when I loved the topic of the lecture, I spend more time on preparing it by developing the content with current research, preparing better presentations, and searching for new ways to attract the attention of students to the issue.

Moreover, based on my experience as a design practitioner, I observed many times that when people who are involved in the design process are willing to be a part of the project and eager to realize it, they work harder and longer even after the work hours.

Additionally, those have always been the projects that involve many different concept designs and creative solutions as a result of investment in interest. As Resnick (2017) asserts, when people invest in their interests, they are likely to be more motivated and willing, which results in connecting with new ideas and knowledge. So I direct my attention to the motivational aspects of design collaborations.

In strategic management practice, incentives are being used as key instruments to motivate both solitary and collaborative efforts (Lee & Puranam, 2015; Larkin et al., 2012). However, there is a distinction between creative tasks and mechanical tasks in terms of increasing motivation by incentives. When the task involves only mechanical skills, extrinsic rewards increase performance; however, when the task involves creative thinking skills, or call for even rudimentary cognitive skills, larger rewards leads to poorer performance (Pink, 2009). The preferences of individuals for engaging in an activity is highly related with their performance and it seems like it cannot be directed with the help of extrinsic motivators in creative tasks.

Research in organizational psychology suggests different linkages between the motivation of employees and their creative performance. When individuals are intrinsically motivated to engage in a task, they act upon curiosity, enjoyment, or a sense of challenge; however, extrinsically motivated actors are driven by the desire to attain a promised goal which is separate from the work itself (Amabile, 1997). Drawing on psychological work on motivation and creativity, there is an ongoing debate on the effect of extrinsic motivation on creative performance, while researchers agree upon the positive effect of intrinsic motivation. At this point, I realized that there is a need to search for the effect of motivation on the creative performance of actors in collaborative design practice. In this regard, this thesis aims to investigate how actors from diverse disciplines collaborating in design processes are being motivated to contribute to the process with high performance based on their experiences. So the research question is formulated as:

“How is the motivation of the individuals are activated towards the task at hand and collaboration during collaborative design processes?”

To find answers to the research question, this thesis adopts an interpretivist approach to uncover and interpret how actors attribute meanings to their experiences, and what affects and shapes their perceptions and actions towards engaging in a creative task in a collaborative manner. 25 semi-structured interviews were conducted with experts from diverse disciplines, who have work experience in the ceramics, construction machinery, furniture, automotive, and home appliances sectors in Turkey. The data gathered from the interviews were analyzed by template analysis with the intention of figuring out the factors affecting the motivation of actors towards the task at hand and collaboration in creative design collaborations.

After the introduction, this thesis will go on with a comprehensive overview of the relevant literature in Chapter 2. It includes the review of current research considering collaborative design as a technical, social, and cognitive process, and continues with a general comparison of these perspectives on their understanding and contribution to the process. Afterwards, the relation between individual motivation and individual and team creativity will be presented based on the research in organizational psychology. The chapter concludes with the research question of this thesis which addresses a gap in current design literature.

Chapter 3, Methodology, begins by introducing the adopted research approach, namely the interpretivist approach, and clarifies the reasoning behind employing semi-structured interviews as a method. Later on, it presents the research design, including the sampling, access, conducting, and revisions made as a result of the challenges and limitations of the applied method. Following this, the chapter provides information on the analysis method, which is template analysis.

Following the methodology chapter, there are two analysis chapters focusing on emotional and rational aspects of motivation in creative design collaborations. Chapter 4 presents and discusses emotional factors affecting the intrinsic motivation of actors towards the task at hand and collaboration. The chapter provides insights on intrapersonal and interpersonal factors that motivate actors intrinsically to contribute to the design of a product in a collaborative manner.

Chapter 5 is concerned with the rational factors affecting intrinsic motivation of actors towards the task at hand and collaboration. The chapter highlights the personal and technical factors as key to enhancing intrinsic motivation even with the contribution of extrinsic motivators. After reviewing the factors separately in both analysis chapters, there are discussion sections that reflect on the factors' effects on task or collaboration motivation and how and to what extent they can be helpful to increase performance due to increased motivation.

In Chapter 6, Discussion, I introduce and discuss the overall contributions of this thesis by synthesizing the findings I presented in Chapter 4 and Chapter 5. The thesis ends with routes for further research.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

Historically, design has been perceived as the activity of an individual designer who is responsible for the whole process and the resulting design activities (Casakin & Badke-Schaub, 2013). However, due to the increasing complexity of products and services in the last decades, design has evolved into an activity that is mainly carried out by teams, which opens new horizons for the design literature by introducing collaborative studies. The literature review carried out here will present the current situation of collaborative design studies from diverse research areas.

After a brief overview on the emergence of collaborative processes in design, a broader review will be provided on what is known about collaborative design in general. Next, different perspectives from diverse research areas on collaborative design, including engineering design, design management, organizational psychology, and cognitive psychology, will be investigated. Since collaborative design is a broad term, research on collaborative design can be investigated from three different perspectives which identify collaborative design as (1) a technical process, (2) a social process, and (3) a cognitive process. Research on collaborative design processes will be investigated from these perspectives and each will present the basis of the perspective, the description of key concepts and terms, studies conducted and the methods used for the research, and lastly counter-views of the specific studies, or the general perspective. Realizing the scarcity of research on '*individual factors*' affecting collaborative design processes, the role of incentives on individual creativity will be investigated as an important factor affecting the conduct of collaborative design processes. Finally, moving on from individual creativity, the literature review will

evolve towards the effect of intrinsic and extrinsic motivators on individual creativity and help formulate the research question of this study.

2.2. The Emergence of Collective Processes in Design

Throughout the history of design, we witness many crises of identity due to changing professional, cultural, technological, and economic situations (Richardson, 1993; Cross, 2001; Bremner & Rodgers, 2013). In the 1990s, there was a tendency to imagine designers as lonely geniuses (Bennis & Biederman, 1997; Thackara, 2005). Designers were being trusted due to the brand values of their names. But this assumption of ‘*star designers*,’ who have the ability to create anything alone, just with their ideals and visions in their mind, did not last long. It was 1993 when Richardson announced the death of the designer as the individual, heroic creator in his article titled ‘*The death of the designer*’, where he stated that ‘*the designer is hired to create a form for a mechanism and/or structure conceived of by an engineer, the function of which has been determined by another*’ (Richardson, 1993, p.39). This message spread in a short period and a new crisis of identity of designer emerged. So, if the designer is no longer the lonely genius, what will her role be in the creation of the human-made world? Furthermore, the idea of star designers –left behind even in the early 21st century – gave rise to the discussions on the conventional disciplinary boundaries. For example, architects such as Zaha Hadid and Rem Koolhaas were crossing the disciplinary boundaries between industrial design, architecture, and even urban design by designing a spoon and a site plan at the same time. Additionally, designers like Philippe Starck and Karim Rashid were the star designers who designed not only industrial products but also interiors and buildings.

Thus, in the beginning of the 21st century, the identity of the designer was once again being discussed based on the blurring boundaries between creative disciplines. Rodgers (2008) asserts that the boundaries of what were once recognized as discrete design disciplines such as product, graphic, textile, and fashion design were and

continue to be dissolved. Sanders (2006) defines the new era of design as *'people who are not educated in design are designing; the line between product and service is no longer clear; the boundaries between the design disciplines are blurring'*. West (2007) reports that Tony Dunne, head of the Designing Interactions course at London's Royal College of Art, explains the situation as *'New hybrids of design are emerging. People don't fit in neat categories; they're a mixture of artists, engineers, designers, thinkers. They're in that fuzzy space and might be finding it quite tough, but the results are really exciting'*. These perspectives on the disciplinary boundaries culminate in the search for a consistent disciplinary framework.

Moving on from these discussions, the point where design researchers mostly agree upon is the increasing complexity of products and services in a global and globalizing world (Wang & Oygur, 2010) and the increasingly competitive environment which forces companies to decrease the time to market and to expand product functionality shifted the product design process from an individual and rather disorganized activity to a systematic activity performed in a multidisciplinary team (Hoegl et al., 2004; Kleinsmann et al., 2007; Valkenburg, 2000). Although the capacities of some individual designers may be impressive, the scope of knowledge required to grasp all aspects of complex problems are often beyond the cognitive limits of a single person, making it necessary for all involved stakeholders to participate, communicate, and collaborate (Arias et al., 2000; Vande Moere et al., 2008). Wang & Ilhan (2009) point out the conundrum of searching for a singular body of knowledge for an inherently *'interdisciplinary'* nature of knowledge useful to designers. From this point, I will try to set forth a variety of efforts qualified as collaborative design efforts in one way or another.

2.3. Collaborative Design Efforts

The development of new products and services has always been a collective process (Bucciarelli, 2002; Lawson, 2004). Moving on from the assumption that designing is

no more an individual activity pursued by the genius designer (Bucciarelli, 2002), design researchers focused on '*collaborative design*' and presented many studies from different perspectives. Kleinsmann (2006) defined collaborative design as:

'...the process in which actors from different disciplines share their knowledge about both the design process and the design content. They do that in order to create shared understanding on both aspects, to be able to integrate and explore their knowledge and to achieve the larger common objective: the new product to be designed' (p.30).

In fact, it is hard to define what '*collaborative design*' is because in the literature there is a wide variety of efforts called collaborative design such as cooperation, co-design, teamwork, interdisciplinary design, participatory design, user-centered design, co-creation, and so forth. Due to this diversity, Wang and Oygur (2010) hypothesize that '*collaborative design is more of a buzzword with unclear conceptual boundaries than it is a clearly defined typology of praxis*' (pp.355-356). So to understand collaborative design and analyze the studies on this subject, I will first explore the disciplinary framework.

Since the death of the designer has been announced many years ago and accepted by a variety of practitioners, educators, and researchers, we can now move on with the collaborative perspectives on design. The first international conference for interdisciplinary studies was held in 1970, at which Jantsch (1972) presented a set of hierarchical terms to describe forms of collaboration that involve alternative disciplines (Klein, 2000). Jantsch's (1972) hierarchy begins with multidisciplinary, and then proceeds with pluridisciplinary, crossdisciplinary, interdisciplinary, and transdisciplinary. Each term is explained in relation with the structure and complexity of teamwork across disciplines hierarchically (Stein, 2007). Jantsch (1972) explains these terms as follows:

'Multidisciplinary is a variety of disciplines, existing concurrently, but with no clear relationship with them. *Crossdisciplinary* involves the axiomatic of one discipline, imposed upon other disciplines at the same hierarchical level, thereby creating a ridged polarization across disciplines towards a specific disciplinary axiomatic. *Interdisciplinary* occurs when a common axiomatic for a group of related disciplines is defined at the next higher hierarchical level or sub-level, thereby introducing a sense of purpose. *Transdisciplinary* is the coordination of all disciplines and interdisciplinary in the education/innovation system on the basis of a generalized axiomatic (introduced from the purposive level down) and an emerging epistemological pattern' (p. 92).

Since the disciplinary hierarchy was first offered by Jantsch (1972), there have been many attempts to distinguish these terms (Gibbons et al., 1994), but there is still ambiguity on the definitions. For example, interdisciplinary is often used in an unspecific manner and has become a common term for general collaboration across disciplines (Dykes et al., 2009), and multidisciplinary and pluridisciplinary are being placed at the same level (Gibbons et al., 1994).

In order to describe the dynamics of emergent practice, Dykes et al. (2009) argue for a consistent and new disciplinary framework for design practice. Attempting to make such definitions, they start with the definition of disciplinary design followed by the definitions of multidisciplinary design, crossdisciplinary design, interdisciplinary design and transdisciplinary design, respectively. *Disciplinary design* involves work within a specific singular domain, which makes use of the concepts and methods of one discipline exemplified by Jonathan Ive as being an expert industrial designer using methods and tools particular to this domain (Dykes et al., 2009). *Multidisciplinary design* is mainly defined as group work between designers and experts from diverse disciplines; however, a designer who is equipped with knowledge from more than one discipline – like Philippe Starck – is accepted as a multidisciplinary designer as well (Dykes et al., 2009). *Crossdisciplinary design* fosters utilization of constructive

collaboration to address the problems of a project. As opposed to multidisciplinary designs, the crossdisciplinary approach is more than the communication between the different disciplines as it makes use of the combination of the knowledge that is specific to another field via its active contribution to the project (Dykes et al., 2009). *Interdisciplinary design* contains at least two different disciplines, with one being predominant (Leinss, 2007). An interdisciplinary designer has the ability to combine the concepts and methods of different fields (Stein, 2007) as in the example of Moritz Waldemeyer – an engineering expert – who has worked with Ron Arad, Zaha Hadid, and Hussain Chalayan. *Transdisciplinary design* involves knowledge or concepts from at least two disciplines, none of which is predominant (Stein, 2007).

‘This work will be innovative, represent new knowledge, conceptions and artefacts and will signify a new type of practice that is a combination of disciplinary expertise, fused to form a newly unified hybrid form’ (Dykes et al., 2009, p.111).

Rodgers and Bremner (2011) bring a new perspective to the disciplinary framework for design practice with the argument for an alternative disciplinarity which they call alterplinary (a portmanteau of alternative and disciplinarity). With the fragmentation of distinct disciplines, including those located in the traditional art and design contexts, creative practice has shifted from being discipline-based to issue or project-based (Heppell, 2006). Under these circumstances, Rodgers and Bremner (2011) offer alterplinary and explain it as:

‘...an alternative disciplinarity where the creative practitioner is viewed as a prototype of a contemporary traveller whose passage through signs and formats refers to a contemporary experience of mobility, travel and transpassing where the aim is on materializing trajectories rather than destinations, and where the form of the work expresses a course, a wandering, rather than a fixed space-time’ (p. 9).

These definitions which can be considered as the attempts of design researchers to create a new disciplinary framework for design practice in our complex world seem to be developed under the effect of the ideal of ‘*genius designer*’ since they only consider the other disciplines as a supporter to keep succeeding under changing conditions. However, it is open to debate whether the project-based, complex design problems of today’s collaborative world place the designer in the center and the most effective position in the collaborative design process or not. The shift in the creative disciplines from being discipline-based to project-based results in the displacement of the designer as being the leader of the design process – like in multidisciplinary design – to an equivalent status with other professionals. For instance, the design of simple consumer good requires a high level of contribution of industrial designers compared to the role of engineering designers (Kim & Lee, 2016); however electromechanical products of modest complexity require equally important roles of industrial designers and engineering designers (Ulrich & Eppinger, 2012).

Based on the definitions from different researchers on different kinds of collaborative efforts, my focus is mainly on ‘*interdisciplinary collaborations,*’ evaluating them as involving experts from at least two different disciplines sharing knowledge on their discipline to create a product with no hierarchical differences and clear boundaries between them. Keeping the preceding aspects on collaborative design in mind, the definition of collaborative design reads as follows:

‘Collaborative design is a joint problem-solving process which requires different knowledge-bases and can only be accomplished by the contribution of experts from diverse disciplines. In collaborative design processes, experts from diverse disciplines work together to accomplish an agreed task by sharing their knowledge-bases with the intention of finding the optimum solution to the existing design problem at hand.’

In the literature, there is vast amount of research on collaborations between designers and engineers. However, they are not the only actors contributing to the design process. Experts from the marketing and production departments and also suppliers contribute much to develop and create a product design as well. Therefore, understanding interdisciplinary design collaborations from a wider perspective, including the collaboration of experts from diverse disciplines, will contribute to the existing design literature.

2.4. Perspectives on Collaborative Studies from Diverse Research Areas

Nowadays, the creation of innovative artefacts such as an aircraft is defined via the interaction of many experts from diverse disciplines, not all of whom may work in one company or geographical site. These participants come to the design situation with pre-existing patterns of work activities, specialized work languages, and different organizational constraints and priorities (Sonnenwald, 1996). Bucciarelli (1999) claims that different participants with different competencies, skills, responsibilities and interests, inhabit different worlds, which causes them to see the object differently even they admittedly work on the same object of design. Bucciarelli uses the term '*objects worlds*' to explain '*a world of a variety of things (which consists of) particular and specialized modes of representation*' (Bucciarelli, 2002, p.222).

On the basis of object worlds, Wang & Oygur (2010) make a distinction between '*teamwork*' and '*collaboration*' where the interaction between the participants having similar object worlds – such as architects and interior designers working on the same project – is more a matter of teamwork; whereas collaboration involves the participation of experts having different object worlds. Hence this research deals with collaboration instead of teamwork because of its focus on different disciplines such as product design, marketing, and engineering. In collaborative design processes, strong interdependencies between design decisions make it difficult to agree upon a single design that satisfies all participants with different object worlds, which results in conflict and affect the design process and outcome negatively (Klein et al., 2006). In

other words, collaborative design is being characterized as a less creative process which is a result of the tendency to gradually altering the well-known products of successful designers instead of searching for totally new and radical and outstanding forms and functions, as well as a time-consuming and expensive process in which some significant design concerns are being integrated weakly (Klein et al., 2006). Bucciarelli (2002) states that in many instances collaborative design does not succeed and this failure can be seen in two different settings, which are the life cycle of the product and the experiences of the collaborators. In terms of the life cycle of the product, the end product fails in the marketplace and in terms of the collaborative design experience, it is a rarely mentioned issue that the process can be better conducted and improved (Bucciarelli, 2002).

To improve the efficiency and creativity of the collaborative design processes, researchers from diverse areas presented studies on different aspects of collaboration seeking for a better understanding and management of the dynamics of the collaborative design process. These studies can be classified into three categories interpreting collaborative design as a (1) technical, (2) social, and (3) cognitive process. Design methodology, particularly in the engineering domain, has tended to treat the design process as a technical process, which consists of a sequence of activities based on a rationalized approach to a purely technical problem (Cross & Cross, 1995). Besides, there are studies that consider design as a social process focusing on the interaction between participants and the interaction of participants with clients or users. Studies within these two categories have mostly focused on communication between different stakeholders during the design process and try to develop tools or methods to create a shared understanding between participants. Lastly, with the contribution of psychologists to the design field particularly in architecture and industrial design domain, the focus of studies shifted towards the cognitive skills and limitations of participants which consider design as a cognitive process. Below I will present a discussion of each category.

2.4.1. Collaborative design as a technical process

Research mostly in the design management and engineering design domains interprets collaborative design as a technical process. The design process is considered as a sequence of fragmented phases which can be analyzed independently in both perspectives. From this point, I will try to set forth the perspectives of the management and engineering domains.

2.4.1.1. Research from the management domain

In the design management literature, there are three main approaches to understand state-of-the-art of design management, which are managing the product, managing the process, and managing the organization (Sebastian, 2005). In the ‘*managing the product*’ approach, design management is responsible for defining the values to be met – such as aesthetic and functional expectations in use, as well as the economical and technical requirements in production (Sebastian, 2005) –, translating them into a design brief, and guiding the designers in their understanding of the requirements (London, 2002). In the ‘*managing the process*’ approach, design management is responsible for making the design process effective, efficient, and lean through the coordination of tasks and information (Koskela et al., 1997). Managing the organization is understood as the management of a design office and the coordination of inter-organizational decision-making (Sebastian, 2005).

After the short introductions above, ‘*managing the process*’ will be further analyzed, leaving the other approaches behind, since the focus of this section is the collaborative design as a technical ‘*process*’. In order to manage the individual and collaborative design processes more effectively, supporters of this approach have developed different methods and tools (Friedl et al., 2001). They offer to manage the design process by analyzing, identifying, mapping, and arranging various design tasks in sequential or concurrent orders (Austin et al., 2000). The design process is considered as a complex system to be broken down into development phases, units of work, and

product components (Gray & Hughes, 2001). In an early study, Dumas and Mintzberg (1991) categorize design activities into three groups, namely '*form*' (which is viewed as the domain of the industrial designer), '*function*' (which has traditionally been considered the prerogative of the field of engineering), and '*fit*' (falling in between, at the product-user interface; finds its most specialized application in the field of ergonomics). Dumas and Mintzberg (1991) define four models, each of which describes how firms address the issues of form, function, and fit, basically evaluating these three notions as separate activities performed by different experts.

As explained by Dumas & Mintzberg (1991), in '*encompassed design*' one expert is responsible for all the dimensions of design (form, function, and fit), exemplified by engineers designing bridges, which restricts the amount of design expertise available in the first place. In '*decomposed design*', each of the design dimensions is assigned to a different group, which restricts communication across the different design specialties. '*Dominated design*' allows one group to impose its design reality on the others, which allows communication between experts in one direction. Since none of these models are suitable for innovative design processes where communication between participants is of great significance, in the last model, '*cooperative design*,' Dumas and Mintzberg (1991) offer an organizational structure which encourages interaction among the different experts to promote mutual adjustment under conditions that are both dynamic and complex. Moreover, this model evaluates design as an umbrella term which covers specialized design activities as well as experts from different disciplines as '*silent designers*' who link design with related functions such as marketing and production (Dumas & Mintzberg, 1991).

2.4.1.2. Research from the engineering domain

Similar to design management studies, in the engineering design domain, researchers have attempted to generate systematic approaches to manage the collaborative design process (Archer, 1984; Pugh & Morley, 1988; Pahl & Beitz, 1988; Cross, 2000;

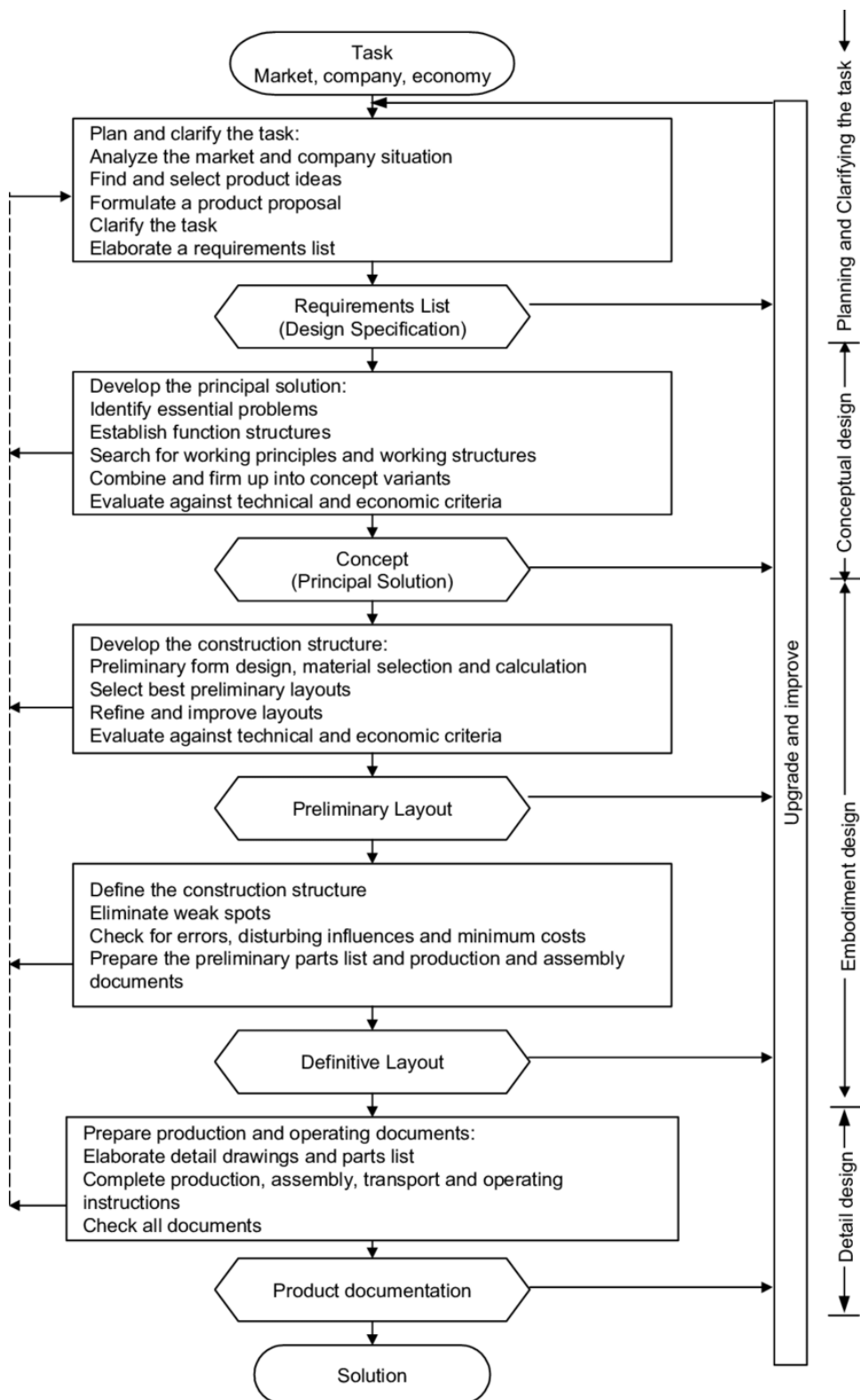


Figure 2.1. Steps of the planning and decision process (Pahl & Beitz, 1996).

Reymen, 2001). The design methods movement attempts to inspect the entire design process, instead of the end product as in the genius designers' era (Jones, 1980; Hubka & Eder, 1996). Moreover, this movement replaces the single designer with the design team working in a rational sequential manner aided with a procedure followed in a prescribed order (Roozenburg & Eekels, 1995).

Reymen (2001) describe a design process as the process of moving from one state to another by performing a task at each stage and evaluating design activities. Pahl and Beitz (1996) develop a phase model where the process is divided into groups of related activities. Each activity in the process leads to the development of a design solution and results with a decision which is followed by another task to be developed (Figure 2.1).

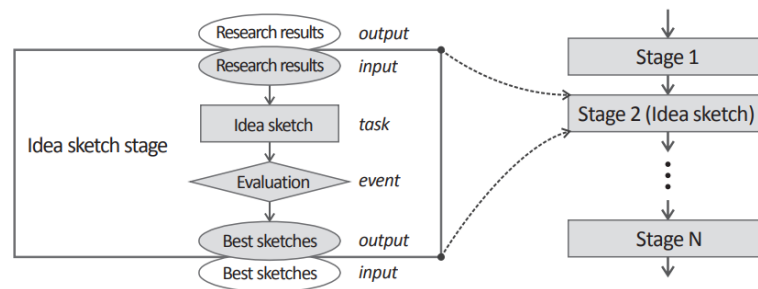


Figure 2.2. Sampling of stages in a design process by Kim and Lee (2016)

Likewise, Kim & Lee (2016) represent stages of a design process by merging the stage elements; input, task, event, and output, respectively, and exemplify the 'idea sketch stage' composed of 'research results' (input), 'idea sketch' (task), 'evaluation' (event), and 'best sketches' (output) (Figure 2.2).

Although engineering design and management studies tend to evaluate collaborative design processes as being composed of separable parts assigned to different experts, the actual process may differ from the theory. In their research on how industrial

designers and engineering designers collaborate, Kim and Lee (2016) find that in some cases industrial designers – working on the design of electromechanical products of modest complexity with engineering designers – were actively involved in arranging inner functional components (while deciding on the outer shape) which was supposed to be the engineering designers’ domain. Additionally, they show that the actual design process was different from the documented process, which was explained as not following the standard design processes they had documented. This finding is closely related to Maffin’s (1998) finding that designers develop their own approaches in accordance with the product development context.

Similarly, trying to map the conceptual design activity of interdisciplinary teams, Austin et al. (2001) find that the ‘*agreement*’ of the participants to follow a given framework explaining the stages of the design process is a key factor towards team interaction, collaboration, and therefore team effectiveness. Additionally, in spite of the designers’ perception that following a design process that all the participants agree on results in better performance, there is no evidence to suggest that following an iterative or systematic design process results in better design concepts (Austin et al., 2001).

2.4.1.3. The methodological approaches and criticisms on practical applications

Research on collaborative design processes – mostly in the engineering domain – benefits from structured design methods, of which some well-known examples are Pugh Concept Selection (Pugh, 1991), Axiomatic Design (Suh, 1990), and Quality Function Deployment (House of Quality) (Akao, 1990). For instance, Yang (2010) benefits from a ‘*design decision matrix*,’ which is a variation of the Pugh Concept Selection and House of Quality, to analyze how designers make decisions in a group context.

There are also studies on the use of structured design methods, such as the Pugh Chart in '*team decision-making*,' which assert that these methods when applied to practice can produce inconsistent results (Yang, 2010; Olewnik & Lewis, 2003). Olewnick and Lewis (2003) ask the same test subjects to provide ratings for the same criteria on two separate occasions and observe that the ratings differ each time. Yang (2010) observes such a situation in her research where the teams tend to change the ratings when they are unhappy with the numerical value given in order to fit the numbers to their choices.

Research interpreting design as a technical process not only benefit from structured design methods, but also use qualitative research methods like interviewing (Seidman, 2012), participant observation (Spradley, 1980), and archive analyses (Coles, 1997), which are widely used in social sciences. For instance, Kim and Lee (2016) conduct semi-structured in-depth interviews to reconstruct product design processes based on designers' experiences.

Although there are some opposing views on the practical applications of systematic design methods in the collaborative design process – which can be considered a result of the technical perspective towards collaborative design – this need not be evaluated as a total rejection of the use of these methods and the technical perspective towards collaborative design. Instead, the tendency to shift from technical-rationality to social psychology should be taken into account to manage socially complex design collaboration. In relation with this tendency, the approaches considering design as a social process will be set forth in the following section.

2.4.2. Collaborative design as a social process

Despite being a researcher from the engineering domain, Bucciarelli (2002) claims that when collaborative design process is considered as a social process, the application of systematic methods for reconciling the different proposals of collaborators is inadequate because of the uncertainty and ambiguity of the process.

He argues that trying to break up any design task into a set of subtasks, especially in innovative projects, is impossible (Bucciarelli, 2002). From this perspective, the focus of design studies shifts from technical studies to communication studies when treating design as a social process.

Communication is expected to be a vital factor in design collaborations as in most team situations (Ostergaard & Summers, 2009), since team performance and satisfaction are found to be affected positively by team relations (Lurey & Raisinghani, 2000). Social interaction between team members is found to account for a portion (10-20%) of design time (Austin et al., 2001) although it is not included in design models (Ostergaard & Summers, 2009). Communication is vital for constructing a common reference point within a group of collaborators (De'tienne et al., 2012). That is why understanding *which* communication problems occur, *when* – at which stage of design process – communication problems occur, *why* communication problems occur, between *whom* communication problems occur, and *how* to deal with these problems becomes especially important in design collaborations.

Since design collaborations require sharing expertise, ideas, resources, and responsibilities between team members (Ostergaard & Summers, 2009), and the efficiency of the collaborative design process and the quality of the product is related to the communication between team members (Kleinsmann & Valkenburg 2008), a strong communication between team members and shared understanding becomes a significant issue in design collaborations, which will be explained in the following section.

2.4.2.1. The concept of shared understanding

In communication studies, '*shared understanding*' plays a significant role in enhancing communication between people. Likewise, shared understanding is one of

the key markers of collaborative design (Wang & Oygur, 2010). Kleinsmann (2006) defines shared understanding as ‘*a similarity in the individual perceptions of actors about either how the design content is conceptualized (content) or how the transactive memory systems works (process)*’ (p. 68). Wegner (1987) defines transactive memory systems as a set of individual memory systems, which combine the knowledge processed by particular actors and enables individuals to learn about each other’s domain of expertise.

During collaborative design processes, design communication between team members is related with the design content or the design process; however, team members face difficulties in sharing knowledge (Kleinsmann et al., 2007). Having different sets of principles, constraints, and work approaches (Bucciarelli, 1988), a lack of shared background and contextual information (Eckert et al., 2001), geographic dispersion, and differences in culture and language (Anderl et al., 2009) cause difficulties in creating shared understanding (Rasoulifar et al., 2014). Another reason that results in a lack of shared understanding is that design communication is jargon-laden, which makes it hard for experts from other domains to understand (Kleinsmann et al., 2007). Moreover, the representations of design are different for actors from different disciplines, which complicate communication and shared understanding (Bucciarelli, 1996). A lack of shared understanding can cause unnecessary iterative loops and reduce the quality of the final product (Kleinsmann & Valkenburg 2008).

Kleinsmann and Valkenburg (2008) search for both barriers and enablers for creating shared understanding in co-design projects. When shared understanding occurs by evidence of jointly told tales, Kleinsmann and Valkenburg call it an ‘*enabler*’ event; failure to achieve shared understanding is called a ‘*barrier*’ event. They categorize barriers and enablers according to three organizational levels, which are actor, project, and company levels; and according to their content, which are the interface between marketing and development, the interface between the design team and suppliers, the interface between design team and the company, the interface between the market

researcher and the market, and the interface between software and development. With this research, they show that the barriers and enablers influence the creation of shared understanding between actors from different disciplines, which also have effects on face-to-face communication, project management, and organization.

Kim and Lee (2016) note that even though the vocabulary used by product designers and engineering designers are sometimes the same, they may mean different things. For instance, for engineering designers '*concept design*' refers to developing solutions to the working structure and functions associated with how a product works (Kroll et al., 2001; Ullman, 2009). However, for industrial designers '*concept design*' is related with product style and refers to the interaction at the concept design phase, which stands for concept keywords, moodboards, idea sketches, and user scenarios (Press & Cooper, 2003; Tovey & Harris, 1999; Vredenburg et al., 2001). Similarly, Pei et al. (2010) and Rasoulifar et al. (2014) investigate problems associated with collaborative interaction between '*industrial designers*' and '*engineering designers*' during the new product development process and develop a tool for creating shared understanding in '*design representations*' between the participants. The study of the communication between engineering designers and industrial designers is challenging. As a result of their object worlds and training, engineering designers employ systematic problem-solving strategies and justify solutions with facts, whereas product designers, who are trained to solve problems intuitively, rarely rely on quantitative data (Pei et al., 2010). Based on the idea that communication only becomes accurate and effective when the team develops a common vocabulary and by understanding the communicative codes and language within the message content (Persson & Warell, 2003), both studies offer tools for building shared understanding in design representations. The first research narrows down the issue to the design process of '*branded products*' (it is in fact a comparison of three different tools), while the latter study takes the issue in a broader sense and offers a new tool developed as a result of the problems investigated during the new product development process.

Van der Bijl-Brouwer and van der Voort (2014) study shared understanding from a different perspective, focusing on the specific issue of ‘*shared understanding of product use*’ with the claim that there is a need to improve usability-related decision making in product development teams to prevent usability problems in the final product. They present the iterative development of a set of guidelines to support design teams in sharing knowledge of product use through the generation of flexible, explicit, and evolving frames of reference, which result in the creation of shared understanding of product use through the collaborative creation of an explicit frame of reference.

2.4.2.2. Research from the perspectives of collaborators

In the literature, there are some studies on how participants position their work in the collaborative design process. For instance, Feast (2012) builds on research concerning social processes in the design activity through exploring professional designers’ perspectives on the significance of collaboration in their work through semi-structured interviews with professional designers from different professional specializations. Additionally, Hellström (2005) investigates how individuals in a collaborative design team orient themselves on their roles in three categories which are how the roles are being assigned in a group (role-taking), the ambiguities and negotiation on roles in a group (role-shaking), and the breaking or contravening of roles already assigned (role-breaking). He relates the issue with being an ‘*individualist*’ or a ‘*group person*’, which affects the actions of designers in terms of taking, shaking, and breaking of roles among designers.

Lehoux et al. (2011) analyze the issue in the design of three medical innovations, investigating not only designers, but also experts from diverse areas such as biomedical engineers and nurses. They base the study on ‘*modalities of engagement*’ which is defined as ‘*the particular frame of thinking and action that influences how design participants contribute to the design process and engage with the various worlds encountered throughout this process*’ (Lehoux et al., 2011, p. 314). The

findings of the study show that expertise, division of labor among the team members, and motivation of the various participants evolved over time and had different weights in the innovative process.

2.4.2.3. Research methodologies

In order to search for collaborative design processes from a social perspective, researchers benefit from a variety of methods mostly derived from social sciences. Protocol analysis (Jiang & Yen, 2009) is one, which is an empirical research method criticized because of the reality of the types of problems that designers face in real-life situations in a laboratory environment within a few hours (Dwarakanath & Blessing, 1996). Retrospective case studies conducted after the project is finished give the chance to participants to reflect on the whole process (Kleinsmann et al., 2007). Furthermore, in recent years ethnographical research methods (Hammersley & Atkinson, 2007) are being used to provide insight into the complicated interaction between participants working together (Feast, 2012). For instance, Persson and Warell (2003) use participant observation (Spradley, 1980) and semi-structured interviews (Seidman, 2012) to understand different relational modes between industrial designers and engineering designers working as a team.

2.4.3. Collaborative design as a cognitive process

A well-known definition describes design as a creative problem-solving process (Roozenburg & Eekels, 1995). Kaufman and Baer (2005) define creativity as a cognitive process by means of which innovative solutions are produced. Since design in recent decades has been considered as a collaborative process, in order to understand design creativity, it is necessary to assess the way design teams behave and perform (Redelinguys & Bahill, 2006). There is a general agreement that team cognition is important for the performance of multidisciplinary teamwork (McDonough III, 2000). For the performance of design teams research, mostly in the organizational psychology domain, repeatedly stresses the role of design cognition

(Dong et al.,2013). From this perspective, the design process is described as a sequence of decisions which require different cognitive processes during the development of the design solution (Badke-Schaub et al., 2010). One construct which describes how knowledge is constructed and shared by a team to enable goal-directed actions is the team mental model construct (Mohammed et al., 2010).

2.4.3.1. The concept of mental models

The concept of mental model has developed as a powerful approach to understand higher order cognitive processes and to predict how an individual or a team will perform and behave (Casakin & Badke-Schaub, 2013). The term '*mental model*' was first proposed by Craik (1943), claiming that mind creates small scale models of reality – the internal representations – in order to interact with the complex world. When interacting with the environment, with others, and with artefacts of technology, people develop internal mental models of themselves and the things with which they are interacting (Norman, 1983). The construct of mental model can be seen as a simplified representation of reality that serves for processing of new information and acting in unknown situations with little mental effort (Badke-Schaub et al., 2007).

According to Badke-Schaub et al. (2007) mental models for design can relate to the knowledge about the task, the process, the team, the competence, and the context, which are explained as follows:

‘The *task model* relates to a person’s stored knowledge regarding the particular task; the *process model* refers to the knowledge of how to solve a task; the *team model* includes the knowledge about the other team members, the knowledge about their abilities and the responding roles and responsibilities, and how to interact with the different team members; the *competence model* is a general confidence in how far the team is able to perform a task; the *context model* refers to all the background knowledge, which reflects the given

situation such as the used media of communication, organizational aspects and facilities, and further more.’ (p.9)

The claim for studying mental models is that the development of mental models can help gaining insight into team coordination and team performance (Klimoski & Mohammed, 1994) to guide the behavior of team members when tackling new and ill-structured design situations (Stempfle & Badke-Schaub, 2002).

2.4.3.2. Team mental models and collaborative design

In organizational psychology studies, mental models of teams operating with complex technical systems characterized by well-defined, highly focused, and highly coordinated tasks are the main focus. However, in design practice, design teams work on wicked problems that lack a well-described set of permissible operations or enumerable set of solutions (Rittel & Webber, 1973). Additionally, team members with heterogeneous backgrounds (such as in multidisciplinary teams) have different individual goals and interests and thus, their mental model of the design situation may diverge to a large extent with regard to other teams (Casakin & Badke-Schaub, 2013). The assumption is that members of a team designing an artifact must share their mental models of that artifact to a ‘sufficient’ degree so as to enable an integrated end-solution despite labor division in its development (Goldschmidt, 2007). A high level of sharedness of individual mental models might result in a pattern of behavior known as ‘*groupthink*’ (Janis, 1982), which means that as a result of too much cohesion in a team in relation with the similar mindsets of actors, it becomes hard to realistically evaluate alternative solutions because of the unanimity among the team members. On the other hand, low levels of sharedness of mental models are associated with a lack of coordination, which leads to poor performance (Badke-Schaub et al., 2007).

Mohammed and Dumville (2001) argue that the optimal degree of sharing depends on the specific environment in which a team operates, the nature of the task, and in terms

of development; i.e., in which stages of its life cycle a group is working. Denton (1997) observes that teams initially formed spend much time and energy to base their mutual understanding about the content and agree on common goals. According to Casakin and Badke-Schaub (2013), the existence of a shared mental model is desirable in the earlier stages of the design process so as to perform better and reach a large number of innovative solutions. However, in a recent study Badke-Schaub et al. (2007) claim that greater divergence of mental models at the beginning of a design task (in order to generate creativity), coupled with greater convergence of mental models at the end of the task (in order to facilitate implementation), may contribute to high performance.

While sharedness of mental models is being referred to prevent the clash of views in multidisciplinary design teams, in the meantime, cognitive diversity is being promoted for the sake of creativity. Creative performance in teams is not achieved mainly by agreement but needs cognitive conflict (Badke-Schaub et al., 2010). Cognitive conflict is defined as task-related divergence resulting from a comparison between one's current own mental model and perceived information, usually provided by another source such as a team member (Badke-Schaub et al., 2010). Researchers such as Putnam (1988) and Rahim and Magner (1995) define five conflict behavior styles which are (1) competing, (2) collaborating, (3) compromising, (4) avoiding, and (5) accommodating. In *competing* conflict, one's own concerns are set above the concerns of other parties, which provokes a win-lose situation; when *collaborating*, a person tries to work together with other people to find a solution that satisfies the needs of everyone concerned; when *compromising*, the objective is to find a suitable, mutually acceptable solution that partially satisfies all parties; *avoiding* is effective in conflict situations where issues other than the best solution are more urgent, or when confronting the conflict is more damaging than non-action; *accommodating* comprises low concern for self, and high concern for other parties, which supports a positive climate where harmony is a high priority.

In different phases of the design process, cognitive conflicts should be treated differently to gain the best output in terms of performance (Badke-Schaub & Frankenberger, 2004). The effect of team mental models on understanding and managing collaborative design processes will be further explained in the following section via research from the field.

2.4.3.3. Criticisms and field studies on team mental models in design teams

Although team mental models have much to offer the study of design teams, the individualistic, mentalist, and cognitivist tendency to focus on cognition as a mainly individual, passive, and disembodied affair involving the rule-bound internal manipulation of symbols is ill-suited to understanding to thoroughly the social, dynamic, and emergent character of knowing in design teams (Marshall, 2007).

Earlier work promotes a unitarist portrayal of team mental models with the assumption that sharing of mental models within a team means that members have overlapping cognitive frameworks (Cannon-Bowers et al., 1993; Duncan et al., 1996). However, later research on mental models set forth new understanding of the concept by appreciating the possibility of coexistence of mental models in a team (Mathieu et al., 2005). Besides the different views on the sharedness of team mental models, the accuracy of team mental models is being questioned as well. Even if all members of a team agree on a common mental model, it does not imply that the model is accurate (Rentsch & Hall, 1994). Furthermore, when, under which circumstances, and what degree of sharedness of design teams' mental models lead to a high performance and creative results have not been clearly defined.

Goldschmidt (2007) studied the role of visual representations as part of task mental models in creating a shared mental model of the designed entity. As a result, she claims that when the team agrees on a sketch or series of sketches to become the basis on which a full solution is later developed, a mental model is truly shared in the team.

The effect of sketches on developing a shared task mental model in a design team is clarified with two examples; (1) the Delft Protocol Workshop (Cross et al., 1996), and (2) observations from a design studio during a critique between the student and teacher. Similarly, Neumann (2012) searches for the influence of collective sketching on developing shared mental models and finds that the use of sketches in the team as a common ground can help to create a shared mental model. Moreover, the study showed that the mere use of sketches is not enough to create sharedness; the sketches have to be used commonly within the team in order to function as a common ground.

In design collaborations, when the comparison between one's current mental model and the perceived information from another team member result in a task related divergence, cognitive conflict occurs (Badke-Schaub et al., 2010). Although cognitive diversity among team members leads to create different insights and solutions to the existing problem, they also cause a clash of different views, values, and goals (Jehn, 1997; Jehn et al., 1999). For this reason, there is a general tendency to prevent cognitive conflict between team members to diminish its detrimental effect on team performance. On the contrary, in a research on how design teams cope with cognitive conflict, the researchers find that it is not only agreement between team members that supports creative performance, but also cognitive confrontation helps achieving creative performance (Badke-Schaub et al., 2010).

In contrast to measuring the team mental model of design teams after the process is completed, Dong et al. (2013) seek for a method that allows for measuring the team mental model of design teams over time while they are engaging in activities. Dong et al. (2013) combine two proven methods; latent semantic analysis and reflective practice analysis, to scrutinize the language of design team conversations when designers are generating a design concept as the basis for understanding the content and structure of their team mental model. With the use of two complementary methods to identify if the quality of the process of design stems from a quality team mental

model, Dong et al. (2013) reveal that there is no simple correlation between the quality of the team mental model and enactment for design tasks.

2.4.4. Comparison of the perspectives on collaborative design

Collaborative design is a complicated issue to investigate, not only because of the complexity of the product to be designed or the problem to be solved, but also because of the diversity of the participants of the process ranging from designers, engineers, manufacturers, to users. In order to examine the studies in the field, the studies were analyzed from three perspectives which are collaborative design as (1) a technical process, (2) a social process, and (3) a cognitive process. In fact, this fragmentation should be evaluated as a classification used for creating a general overview of the research on the collaborative design process from diverse research areas.

All three perspectives can meet on a common ground which is '*creating shared understanding*'. The technical perspective offers systematic approaches to define exactly how the process will be conducted and the roles of participants to achieve a common goal, which can be evaluated as an attempt to make participants understand the way towards satisfying performance. Design as a social process and a technical process are much more integrated with the notion of '*shared understanding*' with one main distinction; the first one deals with communication studies, while the latter deals with cognition. This distinction creates two different attitudes towards the issue of collaborative design. The social perspective tends to deal with collaboration with the acceptance of all its diversities, while the cognitive perspective seeks for one common solution – to reach a team mental model – to the problems occurring because of diverse mental models of participants. This also results in a difference of methodologies. In communication studies, researchers mostly benefit from qualitative research methods, while in cognitive sciences quantitative methods are widely used in addition to qualitative methods.

On the other hand, the technical aspect tackles complex issues by fragmenting them into smaller pieces and researching each piece separately. This tendency – although still being favorable in some aspects – dates back to the disciplinary fragmentation of the 20th century. However, current approaches tend to evaluate the collaborative design process in a broader sense including the interaction of the participants as part of the collaborative design process from a social and cognitive perspective. Eventually, it would not be inaccurate to say that all three perspectives have much to contribute to the understanding of the collaborative design process.

Although these three perspectives shed light on the management of collaborative design processes from different dimensions, there is another dimension that affects the process, which I will call the '*motivational*' dimension. In organizational psychology, there is vast amount of research on the effect of individual motivation on individual and team performance. Likewise, the role of individual motivation on creativity is a central concern to psychological studies. Besides, organizational economics have increasingly studied the relation between incentives and motivation. However, the role of individual motivation on collaborative design has not been studied. Moving on from this inference, I will set forth research from the management, organizational psychology, and organizational economics literature on the relation between individual motivation and performance in the following section.

2.5. The Role of Incentives on Intrinsic Motivation for Developing Creative Ideas

Employees are deemed as a central source of value-creating ideas in management thinking (Baumann & Stieglitz, 2014). In order to motivate people and direct their efforts towards generating value-creating ideas, incentives are used as a key instrument in management practice (Lee & Puranam, 2017; Larkin et al., 2012). Incentives are used to motivate not only solitary efforts, but also collaborative ones in order to obtain better performance for individuals and organizations they belong to (Lee & Puranam, 2017).

Sauermann and Cohen (2010) define incentives as '*benefits that are contingent upon individuals' effort or performance*' (p. 2135). Incentives are either monetary, such as financial bonuses or promotions, or nonmonetary, such as recognition, improving social welfare, and self-satisfaction. There is a broad consensus that incentives matter in better performing individuals (Lee & Puranam, 2017). However, the claim that incentives, like rewarding value-creating ideas of employees, can be used as a tool for innovation by the managers is highly contested (Baumann & Stieglitz, 2014).

The individual effects of incentives have been subject to agency theory in economics (Holmstrom & Milgrom, 1994; Jensen & Meckling, 1976). Agency theory-based studies mostly agree upon the positive impact of performance-related payment on the effort level of employees on their own tasks (Lee & Puranam, 2017). In contrast, equity theory (Adams, 1963) asserts that individuals not only care about the amount of rewards they receive, but also seek for a fair treatment in respect to their peers performing similar tasks.

In search for the effects of rewards on the motivation of actors, cognitive evaluation theory draws a distinction between two aspects of rewards, namely '*controlling rewards*' and '*informative rewards*'. According to Ryan et al. (1983), if one must perform a task '*in some particular way, at some particular time, or in some particular place...to receive the reward, the reward tends to be experienced as controlling*' (p. 738). This seems the opposite of autonomy, which lets the employees behave on their volition and choice about what they do, when they do it, who they do it with, and how they do it (Pink, 2009). A widely accepted fact about autonomy is that it is beneficial to incentivize creativity. On the contrary, controlling rewards are deemed detrimental for the motivation of individuals since they turn play into work and the player into a pawn (Deci, 1995). If a reward provides meaningful, positive information about one's competencies and permits a sense of personal control, then the reward is judged as informative and can increase intrinsic outcomes (Deci, 1975).

Amabile (1997) divides extrinsic motivators into three groups, which are (1) informational extrinsic motivators that either confirm competence or provide important information on how to improve performance; (2) enabling extrinsic motivators such as rewards, recognition, and feedback that directly increase the person's involvement in the work itself; and (3) controlling extrinsic motivators such as constraints on how the work will be done, which has a detrimental effect on the motivation of individuals, contrary to the first two categories' positive effects (p.45).

Although companies seeking for innovative solutions provide rewards to their employees (Hamel & Breen, 2007), organizational scholars are skeptical about the effects of high-powered rewards on the generation of value-creating ideas by employees (Jones & Butler, 1992; Zenger & Hesterly, 1997) due to their potentially dysfunctional effects on motivation and behavior. In their study on the effects of performance-based rewards on employees in promoting value creating ideas, Baumann & Stieglitz (2014) found that high-powered rewards are wasteful since they generate excessive number of good ideas that lie idle and they cause strong competition which has a detrimental effect on employee motivation.

Competition for prizes within organizations is a central topic of tournament theory that seeks to understand the relation between rewards such as financial bonuses and the optimal effort of employees (Lazear& Rosen, 1981; Prendergast 1999). The main argument of the theory is that optimal effort of an employee increases in parallel with the increase in the value of the prize, and decreases with the number of contestants (Hellmann & Thiele, 2011). Additionally, Bartol and Locke (2000) argue that incentives affect the effort of employees only if individuals value and choose to pursue the incentives. Likewise, Sauermann and Cohen (2010) state that optimal effort increases due to the preference of the employee for the reward. If incentives are considered sufficient for the employees, then they also promote knowledge sharing (Wolfe & Loraas, 2008), which is a critical issue in design collaborations. Thus, an individual's optimal effort and motivation to perform an activity is not only related

with the expected benefits from engaging in that activity (e.g., financial bonuses), but also depends on the intensity of her preferences for these benefits (Sauer mann & Cohen, 2010). This finding stresses the importance of motivation on the performance of employees for developing creative solutions to existing problems.

2.6. The Role of Intrinsic Motivation on Developing Creative Ideas

Individuals' preferences for engaging in an activity are highly related with their performance. In his speech at 'Mind the Product 2015', Nilan Peiris states the role of employees' decisions on products produced and the customers' experiences as follows:

'Product is People. Every single person in your organization influences the customer experience in some way, so the experience your customers have is a direct outcome of the people you hire and the decisions they make. There's a myth in the corporate world that people do what you tell them to do, but in reality, they only do what they want to do so you have to build a culture that influences those decisions in the right direction' (Peiris, 2015).

A considerable body of work in organizational psychology suggests different linkages between the creative performance of employees and motivation. There is a clear distinction between two types of motivation, which are intrinsic motivation and extrinsic motivation. Amabile (1997) defines intrinsic and extrinsic motivation as follows:

'Motivation can be either intrinsic (driven by deep interest and involvement in the work, by curiosity, enjoyment, or a personal sense of challenge) or extrinsic (driven by the desire to attain some goal that is apart from the work itself—such as achieving a promised reward or meeting a deadline or winning a competition)' (p. 44).

A highly intrinsically motivated person is likely to approach a given problem with a higher intensity of cognitive effort and to draw skills from other domains, or apply great effort to acquiring necessary skills in the target domain (Amabile 1997; Camerer & Hogarth, 1999). To some extent, a high degree of intrinsic motivation can even make up for a deficiency of expertise or creative thinking skills.

Drawing on psychological work on motivation and creativity, a central argument is that *'people will be most creative when they are primarily intrinsically motivated rather than extrinsically motivated by expected evaluation, surveillance, competition with peers, promise of rewards'* (Amabile, 1997, p.39). Moreover, in search for creative efforts, rewards have a dampening effect on divergent thinking, since they redirect attention away from the heuristic aspects of the creative task and toward the technical or rule-bound aspects of task performance (Woodman et al., 1993). However, there is disagreement on the dampening effects of extrinsic incentives on motivation. Some research has indicated that extrinsic incentives can have a positive effect on individual creativity if the rewards are tied explicitly to the novelty and creativity of the product (Eisenberger & Cameron, 1996; Eisenberger & Rhoades, 2001; Eisenberger & Shanock, 2003). Likewise, Gagne & Deci (2005) suggest that:

'When rewards are administered in an autonomy-supportive climate, they are less likely to undermine intrinsic motivation and, in some cases, can enhance intrinsic motivation' (p. 354).

On the contrary, research in organization psychology features prominently that extrinsic rewards crowd out intrinsic motivation and undercut creativity (Deci, 1995; Amabile, 1997; Ariely et al., 2009; Manso, 2011). At this point, creativity theories become valuable for this research in order to understand the relation between extrinsic motivation, intrinsic motivation and creativity. Prior studies argue that the creativity of a new product design depends heavily on the motives and creative performance of individuals working together in a complex social system (Woodman et al., 1993;

Sauermann & Cohen, 2010; Zhang et al., 2015; Kwon et al., 2015; Kristensson & Norlander, 2003).

In the early studies which date up to the 1970s, creativity was evaluated purely as a product of individual talents and traits in the literature (Moreau & Dahl, 2005; Amabile & Pillemer, 2012). With the emergence of studies examining social, cultural, and even political factors on the creative success (Kruglanski et al., 1971; Lepper et al., 1973; Simonton, 1975; Amabile, 1983) the belief that creativity depends on special qualities of unusual people was questioned. Amabile (1997) defines creativity as *'the production of novel, appropriate ideas in any realm of human activity, from science, to the arts, to education, to business, to everyday life'* (p.40). The componential theory of individual creativity proposed by Amabile (1997) assumes that:

'All humans with normal capacities are able to produce at least moderately creative work in some domain, some of the time—and that the social environment (the work environment) can influence both the level and the frequency of creative behavior' (p. 42).

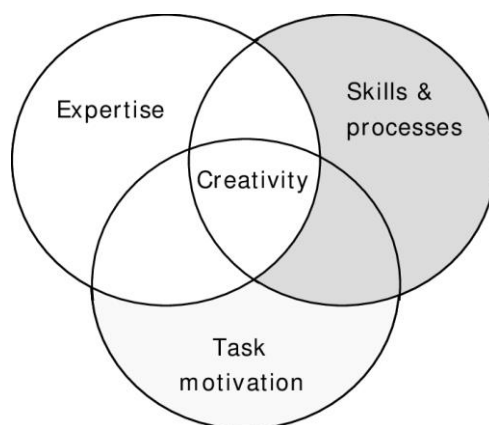


Figure 2.3. Amabile's (1997) three component model of individual creativity

The theory includes three major components of individual (or small team) creativity, each of which is necessary for creativity in any given domain: expertise, creative-

thinking skill, and intrinsic task motivation (Figure 2.3). Although expertise and creativity skills determine what a person is capable of doing in a given domain, it is task motivation that determines what that person will actually do.

When individuals are highly intrinsically motivated, they pay more attention to the task itself in search for exploring it in detail, whereas, task engagement is being avoided in case intrinsic motivation is undermined by extrinsic constraints (Amabile, 1983). *'If we can define task engagement for extrinsic reasons as "work," and task engagement for intrinsic reasons as "play," it will be expected that, phenomenologically, states of highly creative activity will seem like play'* (Amabile, 1983. p.86).

Drawing on the existing literature on motivation and creativity, I would like to compile four influential facts. Firstly, the status of the designer has shifted from being the *'lonely genius'* to *'an actor'* collaborating with experts from different disciplines (Bucciarelli, 2002). The reasons behind the change in the status of the designer are: (1) to compete in global markets with reduced cost and lead time; (2) to develop complex artefacts that require knowledge from diverse disciplines; (3) to create the highest quality products in the shortest time; (4) to help generate creative solutions; (5) to expand product functionality; and (6) to create innovative and competitive artefacts and reduce design and development costs (Wang & Oygur, 2010; Vande Moere et al., 2008; Kleinsmann et al., 2007; Hoegl et al., 2004; Valkenburg, 2000; Arias et al., 2000). So, actors from diverse fields have to collaborate in design processes in order to solve today's complex design problems.

Secondly, in order to reach creative outcomes in design collaborations, individual creative performance is a significant factor as well as the expertise of every individual actor. At this point, a strong communication between team members becomes vital to combine efforts of actors contributing to the collaborative design process and reach

an optimum design solution which necessitates creating shared understanding between team members.

Thirdly, individual creativity is interrelated with task motivation, which may give way to team motivation and performance. Although evidence shows that intrinsic motivation triggers individual creativity, there is an ongoing debate on the effect of extrinsic motivation on individual creative performance. So, it becomes valuable to search for factors affecting intrinsic motivation of individuals towards the task and the relation between extrinsic and intrinsic motivation on performance.

Lastly, individual creativity and team performance is related and being affected from different motivational factors towards the task and collaboration. So, searching for factors motivating individuals intrinsically towards the task at hand may contribute to the existing collaborative design literature. Moreover, people may be intrinsically motivated towards collaboration, which also affects team performance in design collaborations.

Based on these inferences, I direct my attention towards the role of motivation towards the task and collaboration, which may have different effects on creative performance in design collaborations. I claim that motivation of any individual actor in a design team towards the task also has an effect on team motivation and performance.

As a consequence of the facts I deduced from the literature review presented here and the dearth of research on the effect of motivation on creative performance in design collaborations, this dissertation focuses on the motivational aspects of design collaborations. However, doing a research in Turkey on collaborative design processes has some limitations in relation with the situation of industrial design profession in Turkey that effect the data collection process in this research which will be explained in the following section.

2.7. The Situation of Industrial Design Profession in Turkey

The emergence of industrial design profession in Turkey dates back to 1970s with the establishment of industrial design programs at undergraduate level (Hasdoğan, 2009). Since the professional development of industrial design has its roots in educational field rather than technological advancement or market-oriented demands (Özcan, 2009), it was not until 1990s that the need for the services of industrial designers emerged (İlhan & Er, 2016). As a result, only a few of the first-generation industrial designers were fortunate to find work in their own field (Er, 1993). Whereas, most of the graduates find job opportunities in allied fields such as graphic, or interior design, and architecture (Kaygan, 2012; Hasdoğan, 2011).

The rise of industrial design profession in production industry is strongly related with increasing liberal economic growth and Turkey's being part of the European Customs Union Agreement in 1995, which resulted in increased export-oriented production and the seek for designing original products to compete in global markets (Balcioğlu & Emgin, 2014; Özcan, 2009; İlhan & Er, 2016). Although the economy was mostly based on small and medium-sized enterprises with limited design awareness, a few large-scale manufacturers in household goods, automotive, industrial ceramics, and electronics realized the importance of design to compete in global markets relatively earlier and employed industrial designers in R&D departments (Topaloğlu & Er, 2010). The progression of industrial design profession accelerates in 2000s with an expansion in the number of design schools and graduates – which has increased eight-fold in the past 27 years (Hasdoğan, 2016) –, establishment of design offices, organization of design fairs, symposiums, exhibitions, and competitions. Competitions play a crucial role in the rise of industrial design practice by making good design visible for both the society and the manufacturers. For instance, Design Turkey Awards – which is being contributed since 2008 – aimed to *'make visible the benefits that good design brings to the society and industry in Turkey, by rewarding good design which respects user needs and provides added value and competitive advantage to the product'* (Design Turkey, 2008, quoted in Hasdoğan, 2016). This

event is an important step in the development of industrial design profession in Turkey by both bringing the designers and companies that invest in design together and attracting the attention of global organizations such as the World Design Organization (formerly known as International Council of Societies of Industrial Designers) with participation at the highest executive level (Özcan, 2009).

Despite all the developments in the professionalization of industrial design in Turkey, there is still discrepancy between the number of industrial design graduates and the demand for ID professionals in the industry, which result in a highly competitive labour market (İlhan & Er, 2016). Besides, the incongruities between designers' self-perceptions and the managers' expectations remain unsolved (Öz, 2015). In Turkey, designers seem to be competent in drawing and hand skills and being employed for their visualization and CAD skills rather than developing new designs (Kındı, 2007; Korkut & Hasdoğan, 1998). Moreover, industrial designers still express dissatisfactions with the design practice in Turkey with reference to their professional status which is lower than their non-designer colleagues – especially engineers who are being valued for being an older area of expertise (Kaygan & Demir, 2017). As a result, the data gathered in this research should be read in light of the situation of industrial design profession in Turkey as a result of the economic circumstances explained above.

In sum, this research aims to add a new motivational perspective to the existing research on collaborative design processes from social, technical and cognitive perspectives acknowledging the limitations of doing the research in Turkey.

CHAPTER 3

METHODOLOGY

3.1. Introduction

This chapter discusses the research design starting from the research approach of the study. After that, I will present the aim of this research referring to the literature. Next, I will explain the research design in detail. To this end, I will describe the sampling, company, design project and interviewee selection criteria, the conduct of data gathering process, and the change in the sampling and conduct –with the justification of this shift – that I made following the interviews in the first two companies. Finally, I will explain the data analysis process – namely template analysis – step-by-step in order to make it clear and comprehensible, as it was not a linear, but a recursive process.

3.2. Research Approach

This research aims to investigate the collaborative design processes from the motivational perspective, which affect the attitudes of professionals towards collaboration and the task at hand. For this reason, analyzing the process from the actors' perspective based on their experiences becomes valuable. Consequently, the research will be a qualitative study conducted with an interpretivist approach. The interpretivist approach asserts that reality is not out there waiting to be discovered, but is being constructed by the individuals in relation to the social world they are interpreting. Thus, the aim of interpretivist research is to uncover and interpret the meaning constructed through experiences. Here the researcher is interested in how people interpret their experiences and construct their world by attributing meanings to their experiences (Merriam & Tisdell, 2016). Feelings, emotions, and values of

individuals are being explored in interpretivist approach since they help understand the '*subjective*' experiences of individuals (Burrell & Morgan, 1979). Hence, the interpretivist approach considers the experiences of every individual as data independent from the others' experiences in order to shed light on individual insights. Such insights help us explain more fully what affects and shapes individuals' perceptions and actions, which also adds greatly to the knowledge of how organizations work (Stiles, 2004). Therefore, this research tries to understand socially constructed collaborative design processes, starting from its participants' viewpoint.

3.3. Aim

In the literature there is a vast amount of research seeking for a better understanding and effective management of collaborative design processes from the fields of design methodology, engineering design, design management, organizational psychology, and cognitive psychology (for a review of these studies, see Section 2.4). Following an in-depth search on collaborative design from diverse research areas and investigating different factors affecting the performance of individual actors and teams in collaborative design processes, this research is constructed on the experiences of individuals participating in the collaborative design process of a product where intense interaction between actors from diverse fields occurs. Understanding these experiences, it was aimed to capture the motivation factors of participants towards engaging in a design process and to collaborate intensively, which affect the creativity of individuals and the end product.

3.4. Research Method

This research consists of a verbal method – namely semi-structured interviewing – to gather data on the experiences of actors contributing to a collaborative design process. In social sciences, most of the qualitative data has been collected through interviews, especially for issues that we cannot directly observe, such as feelings, how people

interpret the world around them, behaviors that took place previously, and the meanings that people attach to on-going situations (Patton, 2015). Essentially, the interview is the favored approach where the researcher seeks for highly personalized data (Gray, 2004). The situation is pertinent in organizational studies as well. Interviewing is deemed as a fundamental method among most organization scholars to shed light on organizational issues such as decision-making processes, the values and beliefs of people towards the organization, leadership styles, and how innovation processes are being managed (Alvesson & Ashcraft, 2012). By asking people questions about their experiences, the researcher enters the interviewees' perspective through interviewing (Patton, 2015). These reasons also overlap with the reasons to choose interviewing as the data gathering method in this research.

Interviews can be categorized in terms of structure and their theoretical stances in general. In forms of categorization, the proposed research will be conducted through semi-structured interviews from an interpretivist approach. In order to collect the whole story behind a collaborative design process, semi-structured interviews will guide the researcher to reach the intended outcome. In semi-structured interviews, the whole process is guided by a list of questions without the limitation of an order or exact wording (Merriam & Tisdell, 2016). Semi-structured interviews are vital when the researcher seeks for the subjective meanings that the interviewee ascribes to events (Gray, 2004).

3.4.1. Sampling

Before starting the interview, it is important to select the right participants. Well-selected interviewees, among whom there is some breadth and variation, is a first step towards good interviewing. The point that the researcher must be careful about is to avoid considering the people that she has ready access and share similar values as the right interviewees.

In this research, I aim to gather data about motivational factors that affect collaborative design processes, learning from as many actors from diverse disciplines as possible to look through the existing situation from different perspectives. In existing studies on collaborative design processes, there is an overall focus on the contribution and close interaction between designers and engineers. However, there are also many other contributors such as the marketing, production, quality, and even purchasing experts who take part in the process and have an effect on the development of a product. Their contribution sometimes results in major changes in the process and final product. This research considers the contribution of these actors to the collaborative design process as well as the designers and engineers, in order to find out what motivates actors to collaborate intensively. As a result, the initial data gathering strategy of this research was to interview in-house employees who collaborated intensively in the design process of a determined product, regardless of expertise, in award-winning companies.

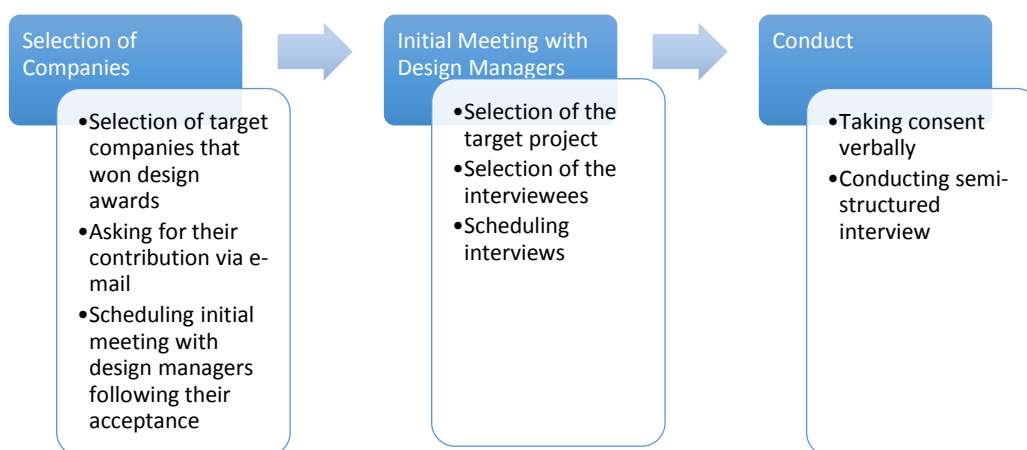


Figure 3.1. Research process chart in the first phase of this research

In order to gather data from actors who work in collaboration with experts from diverse disciplines to come up with a creative design solution, I used a typical purposeful sampling where "*the researcher highlights what is typical, normal, and average*" (Patton, 2015, p.268) and selects the sample that reflects those criteria

(Merriam & Tisdell, 2016). I followed a data gathering method that I seek to find companies where product design processes are conducted in a collaborative manner. Then I conducted semi-structured interviews with experts from diverse disciplines who contributed intensely to the collaborative design process of a selected product in the first phase of this research (Figure 3.1).

After conducting interviews in two different companies from ceramics and construction machinery sectors in Turkey, I made a slight change in the sampling method and conduct in order to increase the depth of the data collected through the interviews. As a result, in the second phase of this research, I seek to find directly experts from diverse fields who contributed intensely to collaborative design processes throughout their career (Figure 3.2).

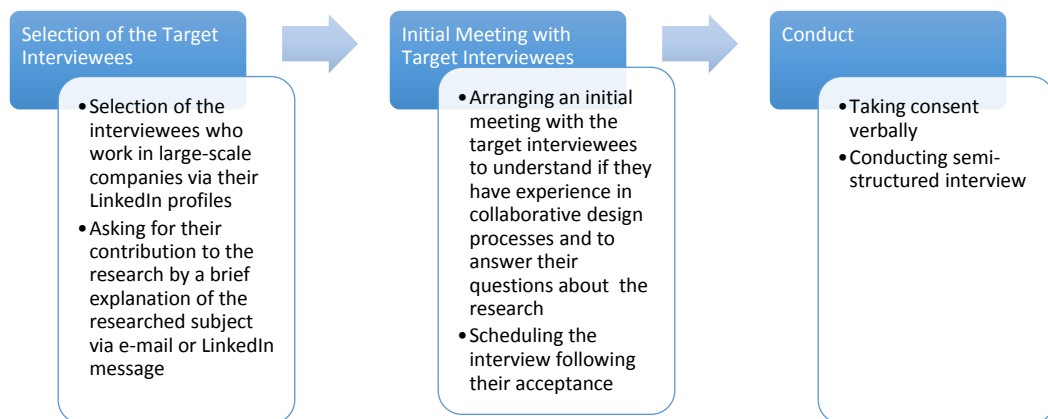


Figure 3.2. Research process chart in the second phase of this research

In the following sections, I will explain the research process starting from the selection of companies, selection of the design projects to talk about their processes, selection of the experts who contributed to the collaborative design processes of selected projects, and the conduct, respectively. Additionally, I will clarify the reasons behind

the change in the research design in detail in Section 3.4.7 and explain the strategy of sampling and conduct in the second phase of this research.

3.4.2. Selection of the Companies

In order to find the target companies to get in contact with, I searched for the leading corporate companies that won national or international design awards, starting from the ones that won 'Design Turkey Awards', due to two reasons. First, the companies that receive design awards invest in design and come to the forefront with design (Hasdoğan, 2012). Second, through interdisciplinary collaboration, the past experiences and knowledge of different experts integrate and actors collaborating have enough information to solve complex design problems in a creative way (Feast 2012, Sonnenwald 1996, Smulders et al., 2008, Adams et al., 2009). So, award winning companies seem to have more tendency to conduct and complete collaborative design processes successfully in order to come up with creative solutions as intended in the sampling of this research. Having a design award does not guarantee that the process has been conducted in a collaborative manner, however, it is evaluated as a symptom of investment in design in this research. The target companies are not limited to a sector; instead, they are expected to be from diverse sectors seeking for creative outcomes.

In search for the award-winning companies where design processes are being conducted in a collaborative manner, I made a list of the companies that won Design Turkey Awards in the last two competitions in 2016 and 2014. The reason behind the choice of the last two competitions was not to go back in time to prevent the loss of recollection in the experiences of participants when interviewing on the collaborative design process of that product. Searching the Design Turkey website, I reached a total of 100 products awarded from 13 different sectors in the last two competitions (Design Turkey Awards 2014 & Design Turkey Awards 2016). Since collaborative design is crucial when the product to be designed gets complex, I eliminated the award-winning

companies according to the complexity of the product in order to find the ones where intensive design collaboration is being conducted.

By this way, I obtained a list of 21 companies and sent e-mails to either the designer or the design manager of those companies. Together with a brief explanation of the research, there was a letter of invitation (Appendix A) attached, giving information about me, the researched subject and its significance, and asking for their contribution. Four companies replied positively; however, not all the companies were matching the criteria of the sampling. For instance, in one of the companies that accepted to contribute to the research, there was no design department composed of diverse experts to collaborate and create innovative products. Instead, as the design manager explained to me, they preferred to purchase product designs from award winning design offices. Most of the products they sold were selected from the catalogues of those designers and translated into the production schema of the company by the draftspeople. Additionally, the ‘design team’ was only composed of draftspeople, whereas this research pays attention to the contribution of experts from diverse fields working in the design team.

Since the composition of the design team is of great importance, the size of the company emerged as an influential factor for the research. Company size is closely related with the endowment of significant inputs to the innovation process such as money, people, and facilities (Capon et al., 1992). In large-scale companies, investment in design – and in parallel, the design team– seems to increase. As a result, the target companies of this research were identified to be large-scale companies seeking for creative ideas that won national or international design awards with their larger design teams working in collaboration. Only one of the companies who accepted to contribute to this research was matching the criteria of the sampling explained above. So, I started my research in that company, which will be called ‘Company A’ hereupon operating in the ceramics sector.

Since the first company was the one where the design manager replied positively to the invitation letter, there was not a problem of convincing to contribute to the research. In search for a second company to conduct my research, I tried to reach the design managers of 21 target companies by phone, since I could not get any reply via e-mail. However, it was hard to gain access to the design managers and arrange a first meeting to convince them to contribute to the research. For instance, in the second company, it was possible to conduct the research by benefiting from a close friend of mine who acted as the gatekeeper for my gaining access to the owner of the company.

The second company that I conducted research – which will be called ‘Company B’ hereupon – was a large-scale manufacturer of construction machinery, which puts emphasis on creating a difference in the design of construction machinery with their award-winning designs. Since one of the criteria in the selection of the companies was being a large-scale manufacturer that invests in design and comes to the forefront with design without making any preference of sector, it was a favorable option, being a large-scale company and having national or international design awards. The complexity of their products, which calls for intense collaboration between designers and engineers, was also advantageous for the research.

Once a company was selected, an initial meeting was arranged with the design managers in the company right after their acceptance of the invitation to contribute to the research. The aims of these initial meetings were (1) to gain an understanding of the configuration of the design team and consult on the collaborative design process in the company; (2) to talk about the aim and scope of the research in detail; (3) to select the appropriate design project; (4) to decide on the participants of the design process from different departments who contribute intensively to the collaborative design process to interview; and (5) to schedule the interviews together.

To get in touch and convince the companies to contribute to a research in design studies have some challenges which I have to cope with. In this study, the situation

was a bit more complex since I asked to interview *all the actors* from diverse fields that collaborated intensively in a product design process. The challenges and limitations of this situation will be explained in a further section, which resulted in a slight change in the sampling of the research.

3.4.3. Selection of the design projects

One of the reasons to arrange initial meetings with design managers was to select a recent project to talk about its collaborative design process in the interviews. The reason behind interviewing on a specific product was to be able to focus on a process and to get detailed information on the collaborative design process of the target product. When the interviewee is given a target product, she starts to think about the design process in detail, which gives way to learn more on personal experiences instead of a generalized design process. Moreover, to talk about a recent project is advantageous because of the fresh memories about the experiences on the collaborative design process.

In the initial meeting with design managers, first I pointed out the critical issues related with the research, such as the importance of participation of as many contributors as possible from diverse fields and intense interaction between them to accomplish an agreed task. Later on, I asked the design managers to select one of the recent projects where a collaborative design process has been conducted effectively based on my guidance on the critical issues about the research. The design managers evaluated the recently completed projects and selected one of them completed a short while ago where there was intense interaction between collaborators. Since the managers have comprehensive knowledge of how the design processes proceed, the selection of the product was made by only the design managers in the first meeting upon how intensely different experts collaborated during the design process. To be an award-winning product was *not* a criterion in choosing the target design process. It was only significant in choosing the target company as an indicator of investment in design.

The design manager in Company A explained the reasons behind her choice of the product as follows: (1) being a fresh project where many actors interacted intensively; (2) being innovative; (3) being a successful product either with awards or the sales of the product; and lastly (4) the effective and successful management of the design process which also affected the success of the product.

The design manager in Company B explained the reasons behind his selection of the product as follows: (1) being the first of its kind designed in the company; (2) the success of the product that was approved with design awards, which also build up the reputation of the design team in the company; (3) intense collaboration between the design and engineering teams, (4) being the first product where new procedural steps were followed to conduct the process effectively, and (5) being a fresh project where participants would remember details about the design process.

3.4.4. Selection of the interviewees

After the selection of the product to interview on its design process, I asked the design managers to decide whom to interview. What we considered basically in the interviewee selection was to choose one person from each department having different knowledge bases, tasks, and responsibilities that contributed intensively to the design process from the very beginning– which is, to find an opportunity for the new product to be designed – till the approval of the finalized design to be mass produced.

In the interviewee selection in company A, the design manager offered one person – either the director or manager from the departments of (1) marketing, (2) product management, (3) design management, (4) communication management, (5) display design, and (6) production. The educational backgrounds of the actors varied from the graduates of industrial design, architecture, city and regional planning, ceramics, economy, and communication departments of diverse universities. All six interviews were scheduled to the same day, one every other hour by the design manager, and the

interviewees were briefly informed about the research by the design manager before the scheduled interview time.

In the interviewee selection in company B, the design manager carefully selected eight people from the R&D department. Actually, the intention was to select experts from diverse departments and expertise, as in the first company. However, the design manager explained that the contribution of other departments such as marketing and production to the collaborative design process was not intense. The marketing department was only responsible for the sale of given products, and the production department was mostly focusing on ensuring daily manufacturing goals. There was no collaboration between the production and R&D departments. Instead, the production department was responsible for only producing the given part. If there was something problematic with the production of it, then the design team was responsible for revisions. The R&D department in the company was composed of an engineering team and a design team. Four of the interviewees were working in the design team, one of whom was the manager of the department. Four others were working in the engineering team, one of whom was the manager of the department. Finally, the marketing manager was the last interviewee to talk about the collaborative design process of the selected product. I also considered selecting the interviewees with different expertise and responsibilities. The educational backgrounds of the actors varied from graduates of the mechanical engineering, industrial design, and business administration departments of different universities, in addition to the graduates of automotive teaching, art, draftsmanship, mechanical draftspeople, and construction technician departments of vocational high schools. All the interviews were scheduled for the same day as in the first company.

3.4.5. Conduct

Following the selection of the projects to talk about their collaborative design processes and the interviewees, the process proceeded with conducting the interviews

based on the determined schedule in the companies. The design managers arranged a meeting room before the planned interview time to conduct the interviews. The reason behind having face-to-face interviews was to be able to conduct all the interviews in a company in a short while to be able to understand and evaluate different perspectives of individuals.

In the beginning of each interview, the interviewees were briefly informed about the aim of the research emphasizing that we would talk about the design process of the *selected* product. The focus of the study was explained to be on the process '*experienced*' by the participants which was supposed to be different from the formal, generic product design processes. After that, the interviewees were informed about confidentiality statements and asked for their willing contribution and permission for voice recording. All the interviews were voice recorded after taking permission of the interviewee. Turning on the voice recorder, the research preceded with the interview guide (Table 3.1). Since interviews were semi-structured, the questions varied based on the gathered data during the explanation of the collaborative design process experienced by the interviewee. The interviewees were expected to give information on the collaborative design process in general, the efficiency of the design process, the contribution of the collaborative design process in terms of their specialized work activities and languages, the problems that arose during the process, the perception of the company and other actors towards the collaborative design process, and lastly the characterization of the collaborative design process by means of adjectives used to define people.

At the end of each interview, I asked for the permission of interviewees to get in touch again if the clarification of any issue will be needed during the transcription or analysis process. The duration of the interviews ranged from 46 minutes minimum and 63 minutes maximum in the first company. In the second company, the shortest interview was 38 minutes and the longest interview lasted 84 minutes.

Table 3.1. *Interview guide used in the first phase*

1	Tell me about the collaborative design process (of the selected product). How did the process proceed? Who contributed to the process intensely in what phases?
2	How could you tell if the process was working effectively?
3	What factors affect your attitude towards the task or collaboration?
4	What problems have arisen in the implementation of the collaborative design process?
5	How did you or the other actors in the process deal with the problems in the collaborative design process?
6	What was different in this collaborative design process than the other ones?
7	How would you define the process? (If the process is a person, how would you define her?)

3.4.6. Challenges and Limitations

To gain access to a target company and convince them to conduct the research was an important issue that I have to come through. Since the researcher's success in gaining access to the right interviewee has remarkable effect on the data collected and the reliability of the findings, gaining access becomes a pressing concern on the researcher (Shenton & Hayter, 2004). In non-elite interviewing, it is not recommended to gain access to the interviewees with the help of third parties (Mikecz, 2012; Seidman, 2006; Welch et al., 2002). However, access to elites poses different challenges compared to non-elites, because they erect barriers intentionally to set them apart from the rest of the society (Shenton&Hayter, 2004; Hertz&Imber, 1993). Accordingly, to get in contact with elite interviewees, using personal connections, obtaining influential sponsors and drawing attention to institutional affiliation of the researcher are recommended (Welch et al., 2002). An elite interviewee in international business research is defined as:

'an informant (usually male) who occupies a senior or middle management position; has functional responsibility in an area which enjoys high status in accordance with corporate values; has considerable industry experience and frequently also long tenure with the company; possesses a broad network of

personal relationships; and has considerable international exposure” (Welch et al., 2002, p.613).’

Based on the definition, the design managers in the companies were evaluated as elite interviewees. Design managers had barriers against the research related with design department to protect the knowledge created in the department, which was supposed to be unique to the company. Under these circumstances, it took much longer time and higher costs to gain access and trust of the elite interviewees (Mikecz, 2012; Welch et al., 2002). An example for this situation can be the explanation of the design manager in the second company that he always receives many e-mails from researchers asking for their participation to their research however, they even do not read and reply most of them. So, it was impossible to gain access without personal connections. Since a close friend of mine knows the owner of the company, he created a contact between me and the design manager in that company with the permission of the company’s owner to contribute to this research.

Once the connection was established, managing the power asymmetry and status imbalance became an axe to grind. In the literature, it is recommended to get prepared well to highlight the seriousness of the interviewer and gain the interviewees’ respect (Mikecz, 2012; Harvey, 2011; Zuckerman, 1972). The first meetings arranged with the design managers helped me to build up a good interviewing relationship and to gain the respect of the interviewee, which also helped decrease power and status imbalance. Seidman (2006) recommends novice researchers to make a contact visit in person to build mutual respect, explain the nature of the interview study, determine whether potential participants are interested, and initiate the process of informed consent. In order to gain trust, it is important to build a rapport with the interviewee from the first contact by being as transparent as possible and providing the required information about the researcher, research, and the interview (Harvey, 2011). Following these recommendations, there was no problem with gaining respect of the interviewees during the research, because the design managers were convinced that I was eager to learn from them in order to analyze the current situation in industry. They

also expressed their opinion that this research will be a useful source for understanding collaborative design situations and help better management of the process.

Another limitation of the research was about the scheduling of the interviews. It was a twofold problem in fact because of the limitations of both the company and me. Since the interviews were conducted in the companies, I had to travel to different cities, which created time limitations. Additionally, the companies responded to the situation by scheduling all the interviews in one day, despite my warnings that it would be better to conduct at most three interviews in a day. One reason of this attempt could be their attitude towards the research as a task to finalize as soon as possible.

After conducting interviews with 14 interviewees with different expertise in two large-scale companies from different sectors, I gained a preliminary information about the collaborative design processes in practice from the perspective of its actors. However, I realized that there was a barrier that decreased the depth of information gained during the interviews. The interviewees were selected and assigned a role to contribute to the research by the design managers. As a result, some interviewees just accepted to contribute to the research because their managers asked them to. Here lies the ethical question of whether employees can really feel free not to volunteer for the research if their supervisor is encouraging participation (Birch & Miller, 2002, pp. 99-100). So during the interviews I had the feeling that some of the interviewees' participation was not completely voluntary, but rather they felt obliged, which resulted in inefficient interviews. However, since there was no power imbalance between the design manager and managers of other departments such as production, I felt that this resulted in their genuinely voluntarily contribution.

On the other hand, although I informed the manager that it is important for me to interview experts who contributed intensively to the collaborative design process, I realized that not all the interviewees were directly interacting with each other in a collaborative manner during the process. A reason why the manager selected those experts to contribute the research can be my demand to interview people from as many

diverse professions as possible. Such interviews were the ones that lasted for the shortest time. Additionally, these interviewees tended to give information about the documented design process in their company instead of talking about their experiences on collaborative design processes. The documented design processes are explained by the interviewees as procedural steps defined by design management to be followed in a sequential order in order to conduct a design process, which is not strictly followed in most cases. This may be because they did not contribute to interdisciplinary collaboration to generate creative solutions, but simply did the tasks involving mechanical skills. Consequently, I realized that I have to revise the interviewee selection criteria and process in order to obtain rich and in-depth data about the experiences of experts during collaborative design processes.

Firstly, I noticed that it is vital to have initial meetings with every interviewee before the interview to be sure that they are the right participants who experienced collaborative design processes previously, and who are eager to contribute to the research. Secondly, I realized that trying to convince companies to contribute to the research was a barrier preventing me from getting in contact with the right interviewees. Thirdly, talking about merely the collaborative design process of a selected product limited the depth of the data that the interviewee can provide about her experiences during the collaborative design process. For instance, during the interviews, some of the interviewees asked to give examples from the design processes they experienced apart from the one I pointed out, in order to broaden the issue by making comparisons. These examples provided rich data on their experiences in various collaborative projects. So, for the depth of data gained through interviews, it became valuable to talk with interviewees about collaborative design processes of different products and even experienced in different companies. As a result, I made a slight change in the in the sampling strategy as will be explained in the following section.

3.4.7. Revisions in the sampling and conduct

Learning from the 14 interviews I conducted, in order to increase the depth of the data, I decided to interview actors from different disciplines who participate in collaborative design processes, starting from designers and engineers. The reason behind this shift is that in the first 14 interviews I observed the most intense interaction between designers and engineers from different departments such as R&D and manufacturing. Experts in sales and purchasing departments had an effect on the collaborative design processes; however, it seemed to be limited to sharing opinions in decision making meetings and writing the brief. So, in search for experts having intense interaction and contribution during collaborative design processes, the target group was likely to be composed of designers and engineers. Still this research did not strictly define the professions of the participants. Instead, the research would evaluate *any creative expert* working as a participant in collaborative design processes of products that require the contribution of professionals from different disciplines. By '*participants*', I mean '*any individual who has a legitimate say in the process, whose words, proposals, claims, and supplications matter and contribute to the final form of the product,*' as defined by Bucciarelli (2002, p. 220).

This time I did not limit the interviewee with a *selected* product's design process, since I intended to interview designers and engineers at first, instead of all the experts contributed intensively to the collaborative design process. By this way, the interviewees shared their experiences not only in their current companies, but also the previous ones, which increased the depth of data.

In search for the participants having experience and a legitimate say in collaborative design processes, first I tried to find via LinkedIn designers and design managers/leaders working in leading corporate companies that won national or international design awards in the automotive, electronics, and ceramics sectors. Having a list of 15 experts, I sent messages to three of them who were the most experienced based on their LinkedIn profiles. In my interviewee selection criteria, I

did not set forth any year of experience because both designers/engineers and managers provide information for my research which result in a variety of years of experience. Among the interviewees who participated in this study, the least experienced participant had three years and the most experienced one had 25 years of professional life.

I did not send messages to all of the experts that I reached via LinkedIn because my initial strategy was to use snowball sampling in order to find the right interviewees. In the snowball sampling technique, the researcher asks the early key participants to refer to other possible participants (Merriam & Tisdell, 2016) in order to gather information-rich cases (Patton, 2015). Two of the experts replied to my message, one of whom replied negatively since she was on maternity leave. So, we arranged a phone call with the participant who replied to my message positively to talk about the research subject and understand if she was the target participant for this research based on being experienced in *collaborative* design processes. After concluding that she is a target participant willing to contribute to the research, we scheduled an online meeting using WhatsApp Video Call out of working hours at the interviewee's request.

The interview started with informing the interviewee about confidentiality statements and taking permission to make voice recording. Following the interviewee's approval, I asked her to tell me about the collaborative design process that she participated which can be evaluated as a well-organized and successfully conducted. All the interviews were guided by some leading questions to direct the interviewee to give information about the intended subject where the interviewee also feels free to talk about any issues related with the subject that can contribute to the research (Appendix B). In the end of each interview, I asked the interviewee whether she wanted me to send her the transcriptions for a quick check for any misunderstanding or not. After that, I asked for their permission to get in touch again if any clarification will be needed during transcription or data analysis. Lastly, I asked them to offer me another interviewee who can contribute to the research.

Snowball sampling worked well in this research to some point because all the interviewees pointed to the right participants for this research as they knew about the research and the professional careers and abilities of other people they pointed out. Since being a creative expert working in collaboration with others was a criterion to select the right participant, the interviewees had more to say about the experts' creativity that LinkedIn profiles cannot provide. Additionally, since there is no hierarchical relation or power imbalance between the interviewee – as a gatekeeper – and the experts she helped me get in contact and interview with, it eliminates the risk of contributing the research unwillingly as a job to be done. While accessing participants, it is important to use gatekeepers to reach their peers instead of people who are above or below them (Seidman, 2006). However, snowball sampling also resulted in a decrease in the diversity of disciplines of interviewees. Although I intended to interview with experts from diverse disciplines, 10 out of 11 interviewees in the second phase of the research were designers. The reason behind this situation can be my selection of a designer for the first interviewee. All the designers pointed out some other designers as a target interviewee, despite I asked them to offer creative individuals from different disciplines who worked in collaborative design processes. The reason behind designers' indicating some other designers instead of engineers or experts from other disciplines may be a result of the friendship between them, or their viewpoint that value designers among other experts in collaborative design processes.

While reaching the interviewees using snowball sampling, the process got stuck at some points when either the interviewee did not offer any other expert or the expert was not the target participant for my research. For instance, one participant suggested a novice designer who has a few months of experience. In that case, I checked the participant's profile from LinkedIn and had a suspicion that she may not be the target participant; however, I got in contact with via phone call. After explaining my criterion to be experienced in *collaborative* design processes, she explained that she had not participated in such a case. So, I thanked for her time. When snowball sampling did not work, I went back to a LinkedIn search and sent messages to experts who could

contribute to the research. Additionally, being a designer, I got in contact with my colleagues to ask for their contribution or lead me to other persons they knew who could contribute to the research. In addition to my being a designer, the academic staff in the METU Industrial Design department also helped me get in contact with some designers from among their graduates or the people they worked together as part of university-industry collaboration projects. By this way, I got in contact with the only engineer who accepted to contribute to this research in the second phase of the research.

In the second phase of the research, I asked the interviewees questions mainly about their experiences on collaborative design processes throughout their career such as, how the collaborative design processes are conducted, what makes a collaborative design process efficient or inefficient, what makes them work willingly/unwillingly on a project, which causes conflict in the team and the methods they use for conflict resolution. The interview guide was revised accordingly (Table 3.2).

All the interviews were conducted online via Skype and Whatsapp Video Call because there was no need to be face-to-face since most of the interviewees were working in different cities, and doing the interviews face-to-face meant a loss of time and money. Conducting online interviews removes the geographical borders between the researcher and the interviewee across the world; however, it has a weakness that due to the quality of internet connection voice can break up (Merriam & Tisdell, 2016). During the interviews I conducted, I faced this problem many times. In such cases, I informed the interviewee about the voice interruption and asked to say it again. It was also hard to transcribe the interviews when the voice was interrupted. Right after the end of each interview, I transcribed the voice recordings verbatim. In some cases, it took a long time to transcribe the interviews because of the tight schedule of other interviews.

Table 3.2. Revised interview guide used in the second phase of the research

Can you tell me about yourself, your educational and career background?
How frequently did you participate in collaborative design processes throughout your career? <ul style="list-style-type: none"> To what extent do these processes require interdisciplinary work? What kind of projects are they? Which actors collaborate in these projects?
Can you tell me the steps of most effective collaborative design process among the ones that you have contributed, starting from the design brief to the end product? <ul style="list-style-type: none"> What was the project? Which actors contribute to the process? What were their expertise and responsibilities?
In your opinion, what factors affect the effective conduct of collaborative design processes?
In your opinion what factors effect collaborative design processes negatively?
Based on your experiences, can you tell me which of the factors that I will list has either positive or negative effect on the efficient conduct of the collaborative design processes and how. <ul style="list-style-type: none"> your teammates the project itself management of the process work environment and conditions organizational culture sector suppliers
Remember a collaborative design process that you contributed willingly and fill out this sentence: I was so happy and worked willingly in that project, because...
Likewise, remember a collaborative design process that you compulsorily and fill out this sentence: I was so unhappy and did not want to be a part of it, because...
How are you being affected when the project stuck at a point? How do you feel and act? Why?
Can you tell me how you cope with conflict in the design process based on your experiences?
Is there any other issue that affects the efficient conduct of collaborative design processes that we have not mentioned yet?
Is there anything that you want to ask me about the research?

In sum, I interviewed 25 participants who have experienced and actively contributed to collaborative design processes. Table 3.3 below demonstrates the distribution of interviewees in detail. In total, this research has 11 female and 14 male participants who are working in companies located at diverse cities in Turkey. Since I selected

Table 3.3. Distribution of the interviewees in total

No	Gender	Company	Sector	Position	Graduation	Experience	Status
1	Female	A	Ceramics	Concept and Design Manager	Architecture	17 years	Manager
2	Female	A	Ceramics	Transformation & Change Leader	Urban Planning	25 years	Leader
3	Male	A	Ceramics	Product Development Manager	Ceramics	22 years	Manager
4	Female	A	Ceramics	Brand Communication Manager	Political Science and Government	15 years	Manager
5	Female	A	Ceramics	Product Manager	Economics	17 years	Manager
6	Female	A	Ceramics	Design Manager	Industrial Design	13 years	Manager
7	Male	B	Construction Machinery	Design Manager	Mechanical Engineering	14 years	Manager
8	Male	B	Construction Machinery	Design Specialist	Automotive Teaching	10 years	Employee
9	Male	B	Construction Machinery	Design Engineer	Mechanical Engineering	11 years	Employee
10	Male	B	Construction Machinery	Draughtsman	Construction Technician	3 years	Employee
11	Male	B	Construction Machinery	Design Specialist	Vocational School/Art	5 years	Employee
12	Male	B	Construction Machinery	Industrial Design Team Leader	Industrial Design	7 years	Leader
13	Male	B	Construction Machinery	Mechanical Design Team Leader	Mechanical Construction Technician	26 years	Leader
14	Female	B	Construction Machinery	Public Relations Team Leader	Translation and Interpreting	6 years	Leader
15	Female	C	Ceramics	Senior Product Development Engineer	Industrial Design	12 years	Employee
16	Female	C	Ceramics	Senior Product Development Engineer	Industrial Design	13 years	Employee
17	Female	D	Furniture	Design Director	Industrial Design	16 years	Manager
18	Female	E	Automotive	Design Manager	Industrial Design	15 years	Manager
19	Male	F	Home Appliances	Product Designer	Industrial Design	4 years	Employee
20	Male	F	Home Appliances	Product Designer	Industrial Design	6 years	Employee
21	Male	F	Home Appliances	Product Designer	Industrial Design	4 years	Employee
22	Female	G	Furniture	Design Manager	Industrial Design	14 years	Manager
23	Male	H	Construction Machinery	Product Manager	Mechanical Engineering	25 years	Manager
24	Male	I	Automotive	Design Supervisor	Industrial Design	11 years	Manager
25	Male	I	Automotive	3D Design Manager	Industrial Design	12 years	Manager

companies and interview with the active participants of collaborative design processes working in those companies in the first phase of the research, the graduation of participants shows great diversity. Later in the research, I directly choose the *interviewee* by using snowball sampling which resulted in interviewing people from specific disciplines. The sectors stated in the table show the current sectors that the interviewees are working in. However, they have gained experience in different sectors during their careers, which also provide information for this research. All the current companies that the interviewees are being employed are large-scaled manufacturers in their sectors. Additionally, the interviewees also have work experience on the medium-scaled companies previously. But they mostly talk about their experiences in their current jobs since they experienced collaborative design processes in the large-scaled companies. As the table demonstrates, 16 out of 25 interviewees were managers or leaders in the companies. Nine of the interviewees were the employees. The interviewees have work experience between 3 and 26 years in nine different companies based on their current job information. The interviewees provided in-depth information about their experiences in both phases of the research.

The difference between the collected data in the first and second phases of the research is that the data gathered in the first phase of the research was limited as compared to the second phase because I directed the interviewees' attention to a specific project and process. However, in the second phase, the interviewees were not limited to a specific product or process. They were free to talk about their experience through their career in different companies and design collaborations. Meanwhile the characteristics of data collected in both phases was the same, whereas the depth of data was different. The reason for the increase in the depth of the data gathered in the second phase of the process is that all the interviewees participating in the second phase were willing to contribute to the research. However, not all the interviewees were willing to contribute to the research in the first phase, since their managers/supervisors asked for their contribution.

The adequate number of participants in a research is specific to the study and can be guided based on two criteria which are:

'(1) a sufficient number to reflect the range of participants and sites that make up the population so that others outside the sample might have a chance to connect to the experiences of those in it; and (2) the saturation of information, where the researcher begins to hear the same information reported' (Seidman, 2006, p.55).

Accordingly, the number of participants adequate for the research was not set forth. Instead, after conducting the research with 25 interviewees, I realized that I was not learning something new. Instead, I felt I heard similar situations that the interviewees reported. This was the point where I decided to stop doing interviews and check the saturation of the data gathered. To be sure, I read through all the transcriptions once to be familiar with the data provided. Then I realized that I can make clusters of data provided by the interviewees. Actually, this was the first step of data analysis when I transcribed each interview and read through all the verbal data gained.

3.5. Template Analysis

In this research, I used template analysis to analyze the data gathered from the semi-structured interviews. Template analysis is a form of thematic analysis that balances the relatively high degree of structure of hierarchical coding used in the analysis of textual data with the flexibility of being adaptable to particular cases (Brooks et al., 2015). In template analysis, the researcher defines a limited number of a priori themes on the basis of a subset of data that correspond to key concepts or perspectives for the study, which enables the researcher to adopt it by redefining or discarding the themes (King, 2012; Brooks et al., 2015). The researcher develops a coding template on the basis of a subset of data first and then applies it to further data while revising the template concurrently (King, 2012). Template analysis offers a clear, systematic,

well-structured yet flexible approach to data analysis which allows the researcher to explore rich in-depth data without the heavy baggage of prescriptions and procedures that result in easily grasping the principles in its application (King, 2012, Brooks et al., 2015). Template analysis works well in studies where the researcher seeks for examining different experiences and perspectives of people within an organizational context (King, 2004). Since this research concentrates on the ‘experiences’ of participants unique to every participant and differs from the others in some ways, template analysis fits the needs of the research.

I will explain the data analysis process step by step only to provide an explicit explanation of the process in general. In fact, *‘analysis is not a linear process of simply moving from one phase to the next; instead it is more recursive process, where movement is back and forth as needed, throughout the phase’* (Braun & Clarke, 2006, p.86). Additionally, analysis is not separate from other processes of research such as engagement with literature, conducting interviews, or writing the analysis. In this research, I had both a deductive approach, where I used themes from literature to analyze the data and an inductive approach, where I generate the themes used in analysis from the data I collected.

In order to analyze the data gained through interviews with template analysis, it is crucial to transcribe the speech into verbal data. The process of transcribing is the key phase of data analysis (Bird, 2005) because it helps the researcher to be familiar with the depth and breadth of data (Braun & Clarke, 2006). Moreover, since my focus was on the meanings attributed to systematic actions towards conducting a collaborative design process, I had an interpretive approach, which means the data goes beyond the literal reading of data (Riessman, 2002). I tried to transcribe each interview right after the end of the interview. In some cases when the interviews last long with a continuous flow of information and I spent much effort on concentrating on every moment of the process, I preferred to take notes on the centering thoughts of the interview, which later turned into initial codes. Transcription sometimes took long hours to finish

because it was hard to understand the sounds where they were cut off because of online interviewing. Additionally, searching for the meanings created during the interviews while transcribing the data helped me to develop a thorough understanding and initial coding of the data. Since the researcher goes beyond the words and seeks for the meaning, including utterances in the transcription (Riessman, 2002) and careful punctuation of the sentences (Braun & Clarke, 2006) consumes the attention of the researcher. So, I included non-lexical expressions, smiles (expressing humiliation or joy), and emphasis in some wordings and pauses. Additionally, I tried to use the correct punctuation during transcription and checked the text once again after I finished each transcription to check whether there was misspelling or misunderstanding.

Following the transcription of spoken data, the analysis process proceeded with generating initial codes from the data. *“Codes identify a feature of the data (semantic content or latent) that appears interesting to the analyst, and refer to ‘the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon”* (Boyatzis, 1998, p.63). In search for the initial codes, I read through all the transcribed data and highlighted the data extracts that demonstrated a potential code. In the next step, I created an Excel chart with codes from the literature that affect the motivation of actors in collaborative processes, which were autonomy, mastery, purpose, pleasure (non-monetary reward), work environment, passion, peers, opportunity, team leader/manager, and communication. These were the codes I derived from literature which were also mentioned during the interviews. After that, I matched the data excerpts I highlighted in the transcriptions with the codes and whenever there was not a code that corresponded to the data, I created a new code, such as trust, spiritual satisfaction, learning, and continuous progression.

When the number of codes reached a large amount that I could not manage on Excel, I sought for commonalities to make clusters that could lead to generate themes. While

doing this, I realized that the data started to create three main clusters, which were: (1) intra-personal factors; (2) task-related factors; and (3) inter-personal factors. These clusters constituted the initial themes of my research in the beginning since *'themes are the recurrent and distinctive features of participants' accounts that characterize perceptions and/or experiences, seen by the researcher as relevant to the research question of a particular study'* (King, 2012, pp.430-431). Each theme was composed of two sub-themes, which were *'emotional'* and *'rational'*. Following this phase, I reread all the collated extracts to figure out whether the themes work in relation with the data excerpts. To ascertain this, I searched for any mismatch between themes and clusters of data, and if there were clear and identifiable distinction between themes (Appendix C). However, while I was matching the collated excerpts with the candidate themes, it was impossible to fit every excerpt neatly in those categories, since there were many overlaps. Later on, I questioned whether the problem arose from the main themes and if there was any other way of arranging the template.

At this point, I focused on the division of emotional-rational factors. In the literature, research on collaboration and motivation comprise many dualities, such as monetary rewards – non-monetary rewards, designer-engineer. Then I started to categorize all codes under these two distinct themes, which were *'rational'* and *'emotional'* factors affecting motivation towards the task and collaboration. In this process, I kept reading the excerpts from the data since I collated both codes and data extracts from the transcriptions to the Excel chart. Under the theme *'rational factors'* there were codes like autonomy, opportunity, work environment and conditions, whereas the *'emotional factors'* were passion, purpose, and pleasure. What I realized at that point was that rational factors were supporting emotional factors according to the data excerpts and they could be a subset of emotional factors. Additionally, emotional factors which were *'passion, purpose, and pleasure'* created a spiral which triggered every other step and resulted in a continuous flow of passionate work.

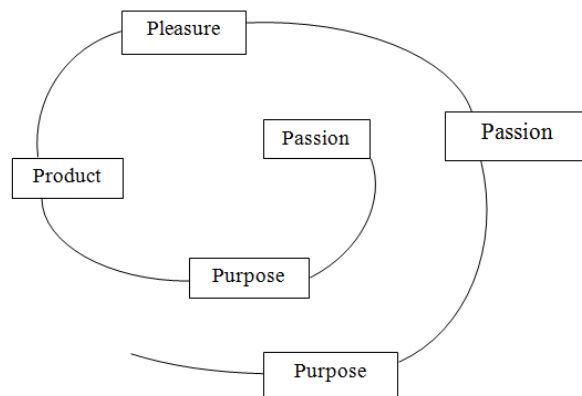


Figure 3.3. Creative design spiral

As seen in Figure 3.3 above, the spiral – which I name the creative design spiral – starts from ‘*passion*’. When people are passionate about doing things, they follow a path to reach their goals, which is composed of a set of ‘*purposes*’. In this case, passion is towards designing the creative end product collaboratively. So, the actors follow a collaborative design process and do their best to reach every purpose step by step towards the end product. Purpose can be every step of a product design process such as market research, writing the brief, time planning, idea generation, and product development. Additionally, purpose in this case can be to create a team spirit, making people ask important questions and find the answers, and making people believe in the need for collaboration. Once the purposes are attained and the collaborative design process comes up to an end, the actors in the team see the end result which they seek for. Seeing the ‘*product*’ – or attaining the purpose towards the end product – is the third step in the creative design spiral. At this point, the feeling of passion towards seeing the end product gives way to the feeling of ‘*pleasure*’. This is when the actors feel proud to be a part of that collaborative design process. The last step, ‘*pleasure*’, is a key point which makes people keep moving on the same collaborative path to keep feeling joyful and proud again. So here the spiral spins once again, and again throughout the experiences of creative actors.

When I realized that the collaborative design process can proceed following this spiral, I tried to classify all the codes and excerpts in relation with these four main candidate themes (Appendix D). However, it was not possible because of two main reasons. The first reason is that it is impossible to figure out if any quote or code is directly related with passion or pleasure. In some cases, I realized that I tend to categorize the same code under the theme passion and pleasure deriving from the meaning I get from the quotes. The second reason is that this attitude leads me to focus on the individual factors affecting collaborative design processes and relate it directly with the product. By this method, I failed to notice '*collaborative*' aspects.

Later on, I turned back to the point where I started and made a clear distinction between '*emotional*' and '*rational*' factors affecting motivation of individuals towards the task and collaboration during creative design collaborations. Both of the main themes consisted of two sub-themes, one of which is '*personal factor*'. The second sub-theme of emotional factors was about the interpersonal issues, which I named '*creating team spirit*'. The second sub-theme of rational factors was about the team, process, and the company, which I named '*technical factors*'. This theme worked well and all codes and data excerpts fit neatly in one of the sub-themes. The two figures below – Figure 3.4 and 3.5 – show the templates that I followed in order to analyze the whole data gathered from the interviews.

The last issue about the analysis was to translate the interview data from its original language to English. Interviews were conducted in Turkish and only the quotes that I used in the thesis were translated into English (See Appendix E for quotes in the original language). It was hard to translate the data, mostly because the interviewees move on to another issue or decide to tell the story in another way before finishing a sentence. Moreover, the colloquial expressions, inverted sentences, and the lack of equivalent phrases and words having the same effect in English made it difficult to translate. To translate the data excerpts, the help of a professional was asked who is eligible to make translations in English language. After she did the translation by

discussing the meanings when it was not clear, I reread all the excerpts and checked the meaning once again comparing with the original language. While doing this, I also changed the names of the interviewees for confidentiality reasons.

1. PERSONAL FACTORS
 - 1.1 Being Passionate about Work
 - 1.2. Reaching the Goals by Continuous Progress
 - seeing the product at market/fair/ads.
 - setting sub-goals/monitoring progress/giving feedback/reaching the goals
 - 1.3. Believing in the Task
 - believe/own a task, because it is challenging/innovative/involve creativity
 - 1.4. Continuous Learning
 - passion towards learning turns out to be passion towards the task/process
 - learning to ask the right questions
 - creating an environment that people can ask questions freely
 - being open to mistakes
 - 1.5. Believing in the Need for Collaboration
 - to increases the diversity of ideas generated
 - to entertain
 - to have different knowledge-bases
 - to create team spirit
2. CREATING TEAM-SPIRIT
 - 2.1. Creating Team Spirit at Actor Level
 - personal relations
 - friendship balanced with professional attitude
 - trust
 - supporting each other even out of work
 - preferences
 - different mindsets and work approaches
 - 2.2. Creating Team Spirit at Departmental Level
 - different mindsets
 - artistic-mechanic approaches
 - priorities
 - 2.3 Creating Team Spirit at Managerial Level
 - valuing the contribution of every actor
 - being fair to everyone
 - creating an environment where actors trust each others' expertise and competence
 - respecting different ideas and opinions
 - providing open communication between the actors
 - developing amity in company with professional attitude
 - using 'we' language.
 - 2.4 Creating Team Spirit at Company Level
 - positioning in the sector that ensures social prestige to the employees
 - valuing employees as a result of organizational culture
 - supporting the employees even out of work
 - providing services of high quality
 - providing career opportunities

Figure 3.4. Template showing the emotional factors affecting motivation of actors towards the task and collaboration

- 1. PERSONAL FACTORS
 - 1.1. Autonomy
 - trust
 - taking initiative
 - 1.2. Incentives
 - salary
 - rewards and recognition
 - appreciation
 - 1.3. Work Environments and Conditions
 - the physical arrangement and design of the office as a whole
 - articular elements in the office
 - flexibility in where and when to work
- 2. TECHNICAL FACTORS
 - 2.1. Corporate Culture
 - interdepartmental relations
 - hierarchical organization
 - power-balance between the departments
 - focus and positioning of the company/project
 - career opportunities
 - 2.2. Team Composition
 - competencies of the team members
 - personalities of the team members
 - 2.3. Process Management
 - design brief
 - time management
 - creating a schedule based on the knowledge of approximate time needed
 - balanced work-load
 - bringing everyone in line by setting check-points
 - flow of information
 - providing necessary data on time
 - coordination between departments provided by the manager
 - being aware of the importance of sharing current data on time
 - collective consciousness

Figure 3.5. Template showing the rational factors affecting motivation of actors towards the task and collaboration

CHAPTER 4

EMOTIONAL FACTORS AFFECTING THE MOTIVATION OF ACTORS TOWARDS THE TASK AND COLLABORATION

4.1. Introduction

This chapter is the first of the two chapters that examine the role of different factors on the motivation of actors towards designing a creative product in a collaborative manner. In this chapter, I will present the *emotional factors* affecting collaborative design processes. In the following chapter, I will demonstrate the *rational factors* affecting collaborative design processes.

In this chapter, I will examine emotional factors under two major topics, which are '*personal factors*' and '*creating team spirit*'. The reason why I start with personal factors is to draw attention to the importance of every actor's attitude towards design collaborations. The attitudes and knowledge of every individual actor contributing to a collaborative design process affect the whole process and the end result. To this end, I will first introduce the '*personal factors*' followed by the factors affecting the '*team spirit*' during creative design collaborations.

4.2. Introduction

When people are passionate about doing things, they seem to overcome the obstacles in a way in order to reach their goals. A highly intrinsically motivated person is likely to approach a given problem with a higher intensity of cognitive effort and to draw skills from other domains, or apply great effort to acquiring necessary skills in the target domain (Amabile 1997; Camerer & Hogarth, 1999). To some extent, a high degree of intrinsic motivation can even make up for a deficiency of expertise or

creative thinking skills. For these reasons, it becomes valuable to investigate the personal factors that motivate individual participants towards contributing to collaborate.

Intrinsic motivation is to some extent related with personality (Amabile, 1997). In addition, my findings revealed other factors, which are (1) being passionate about the work; (2) reaching the goals by continuous progress; (3) believing in the need for collaboration; (4) continuous learning; and (5) believing in the task. I will examine all these factors in detail in the following sections.

4.2.1. Being passionate about the work

In this section, I will discuss the attitudes of people who express their ‘love’ towards the work they do. I will call them *passionate* people and try to explain the effect of being passionate on design collaborations. Passionate people are actors who go beyond the limits to get what is needed. They are the ones who are highly intrinsically motivated as well.

Deducing from the interviews I did, it is obvious that the attitudes of passionate people towards collaboration and projects differ significantly from people who are not passionate about them. İhsan, who is a mechanical engineer working in construction machinery sector, is one of the most obvious examples of an actor passionate about his work. He explained his passion towards designing construction machinery as follows:

[9.4] Let me say this: construction machinery is a totally different thing. I have many engineer friends; construction machinery work is totally related with love. If you do not like it, it is a really hard work; but if you like it, it is absolutely enjoyable. Sometimes when I travel by my car, I see the machine I designed on the road, I stop my car and watch my machine. Yes, I designed this machine; look, I created that part, I just stop and watch it work. Like you are watching your child, it is something different, I cannot explain. (...)

Actually, if you do not like it, if you do not like your job, you cannot do it. You know, most probably you like your job, too. This is something really different. I do not know (...) Construction machinery engineering is something totally different.

A mechanical engineer with 25 years of working in machinery sector as production manager, Çağatay, was one of the interviewees who emphasized working from the bottom of one's heart. He is not only passionate about his work, but he also cares about his teammates' being passionate.

[29.28] The first saying in my team is this: frankly, I do not want someone who would work with brute force, I also do not want to see someone who works with brute force, I am telling you this sincerely. I also tell this to my foremen in the same way. I am interested in people who work by their heart. I mean, when people put their heart into something, they start adding to it. (...) [29.61] I mean, I'd rather have 4 lions instead of feeding 3 sheep here for the project, this is my outlook, I always say the same thing. I mean, that is why I want people who work by their hearts.

According to the participants who highlight the significance of passion, when somebody is passionate about doing something, she feels willing to do it and gives more than expected, as in the case of Berrak, who is a design manager in a furniture company. Here is what Berrak said about her and the teammates' attitudes when they are highly intrinsically motivated to work on a task:

[32.7] You know the part where doing your job happily, 'without selling your soul' (laughs) the designer can say I will not leave before finishing that render; product management then can spend three days after a sudden decision of price change is made, or she can stay awake all night. These kinds of changes and overtime can happen. (...) For example, I can do the checking of catalogs by staying up all night. I mean, in case the product catalog is required to go to press the next day, to make it to the fair.

Like Berrak, Olcay, a design manager working in the automotive sector, loves what he does and indicates the effect of doing a task that he enjoys being a part of as follows:

[30.31] When tasks that I enjoy are distributed, it results in a completely different work, I work in a completely different state. My spouse can tell me that during the time you haven't seen your child, his character has changed a lot, that is because you can focus on completely different things, just like the way a child playing on the street feels, I mean, like I don't want to go home, etc.

Although Olcay uses the term '*enjoying*' the work, he is not talking about pleasure. He is a highly intrinsically motivated design manager who loves his job and can go beyond the limits to achieve his goals. In the following quotes, it will be clear that he is passionate about his job and this feeling makes him do his best even if it costs sleepless nights and a high degree of adrenaline. It is interesting to hear the connection he created between '*play*' and '*design process*', even underestimating the role of '*earning money*' from work when talking about the collaborative design process that people feel motivated to participate.

[30.30] If you can provide work that the other party can really do lovingly, with that job, even without paying, think of it like a game, like people go out to play games. You don't earn money while playing but you can do that job all through the night, because you take pleasure from it.

Olcay also related the design process where the actors feel passionate about participating with feeling a high degree of adrenaline. The experience he explained was closely linked to the '*flow*' experience (Csikszentmihalyi, 2018), where the actor fully concentrates on the action itself without thinking of any other things occurring at the time.

[30.39] I have made a plan, if I do this only this way then the job will be done. Then, when I do that plan, we are talking about an impossible plan – I mean everything works at the same time, nothing goes wrong, such as it is being painted on the day, etc. – I could finish this model 43 days early, if this is like that, I know it won't happen. By doing that 43 days like that, like battling each day, doing that, I mean by bothering people by not losing each day I have lost there, I completed it with one and a half hour remaining. I mean last 14 days the team did not sleep at all, including me. (...) [30.42] Including the holiday, all of this team left at almost 5 in the morning and returned at 7. Started

working. You will say why leave at 5? I don't know, they wanted to see their homes once in a while. Sleepwear, etc. everything for the team was here. [30.46] A process was experienced, of which each moment was filled with excitement, let me say. Like, you know those who let themselves down the mountain, I am sure those may not be very happy in the rest of their life, because they can't feel the same adrenaline anywhere else, like drinking a glass of beer for the remaining of your life or meeting a very beautiful girl, etc. that may not make them happy afterwards. We experienced something similar.

Being passionate about doing work is a really a strong feeling that can lead people to change their lives when they no longer feel passionate about being part of what they are doing. The design manager of a company in automotive sector, Damla, indicated that she can even accept to be a designer instead of a manager if she does not enjoy working in that position any more. Her opinion complies with the fact creativity is most likely to occur when people's skills and their passion overlap at a point (Amabile, 1997).

[24.46] My career has evolved towards management in automotive, but maybe I can work in a different sector as designer. I can discuss that again. I mean, I can be a designer in an effective team again. This is completely about how much I enjoy something. (...) I mean, if there is something I consider to enjoy more, I can quit management, I mean I don't have any objectives such as being a manager like this or become a design director or completely manage a design team. Most probably, I would go towards something I enjoy more. If I enjoy it, or another, if I enjoy that more. I mean, mine is completely satisfying yourself in designs. If I don't like that job, I'll quit it. I mean, I have done this before. (...) [24.49] for example, I can get reactions such as you are too emotional, etc. You know, this seems like not a professional attitude to other people but I think this must be the professional attitude in our line of work. I mean, if I already enjoy that job, then I can use my creativity. Then it actually feeds you.

According to my analysis, creative design processes deserve a high degree of cognitive and technical skills, which also call for going beyond the boundaries of how, when, and in what ways something must be done. This is possible when an actor loves being a part of a creation. Otherwise, it turns out to be a mechanical task that the actor limits her potential to the salary she deserves. On the contrary, passionate people do not do

that task to get the salary they were promised. They create because it is satisfying to be a part of that task. They go beyond their limits because of the promise of experiencing flow and a high degree of pleasure. So passionate people who are highly intrinsically motivated contribute to creative collaborations for the sake of creating.

My findings show that motivating people to collaborate on a specific task has a great potential to conduct an effective collaborative design process *regardless of the discipline* of the participants collaborating. Two of the five interviewees who expressed their passion towards the work they do were mechanical engineers. The other three interviewees were industrial designers. These experts from both disciplines were highly intrinsically motivated to do the task.

Another important point to be considered is that passionate people who express their passion towards the work they do are all managers, except for the first interviewee I mentioned in the beginning of this section, who is a mechanical engineer working in the construction machinery sector. However, for effective design collaboration, highly motivated experts from different hierarchical levels are expected to increase the efficiency of the process and the task at hand. This issue is also an important point that some managers emphasized. They stated that they have trouble in spreading their excitement to the other team members. I will examine this situation in detail in Section 4.2 where I set forth the conditions of creating a team spirit.

Lastly, since this research has a twofold focus, evaluating every factor by its effect on the motivation of individuals towards *the task* and motivation of individuals towards the *collaboration process* is essential. Being passionate is only a personal feeling related with the self. It is not necessarily related with collaboration as there is not always a link mentioned by the participants. In light of my interview data, in terms of collaboration, being passionate may not be a triggering factor that motivates people from different disciplines. However, passion is a triggering feeling that motivates people to effectively work on a task even more than expected, which is then indirectly

related with the collaboration process, since complex design problems require collaboration of different experts to be solved.

4.2.2. Reaching goals by continuous progress

One of the most recurrent terms that I heard during nearly all of the interviews was *'the delight of seeing the product on the market'*. However, I name the section as *'reaching goals by continuous progress'* because seeing the product on the market is one of the most motivating goals but not the only one. Since a collaborative design process is a long-term activity, waiting for a long time to see the product on the market can sometimes be demotivating. Instead, setting sub-goals and reaching them in shorter periods help people stay motivated to be able to work willingly until the product is ready to be introduced to the market.

In this section, I will first explain how actors experienced the moment when they reached their goals at the end of the whole process or at the end of a design phase. A mechanical engineer working in construction machinery sector, İhsan, was really excited about driving the construction machine of which he was a part of the team creating it from the very beginning.

[9.4] One of the biggest pleasures I have gotten in life is when I use a product that has never been produced at this company. The pleasure you feel when you start from the beginning and reach the end. The moment you use that machine...Nothing compares to it, nothing. There are many things I enjoy in life, but nothing compares to that. I mean, driving a car gives me great pleasure, yes, but using that machine is a lot more different. I mean, you feel it's like your child.

Being an industrial designer, I know that industrial designers too often express their feeling when they see the product they designed on the market as giving birth to a child. Deriving from the interviews I made, it is obvious that this feeling provokes creative individuals *regardless of discipline*. Reaching their goals makes people feel

successful and believe in their potential. Here is an example of this interpretation from Emre, who is an engineer working in a construction machinery manufacturing company:

[8.12] We designed a machine from scratch. This gave us pleasure surely, I mean being able to say I made a part of that machine. That is a good thing, a good thing for the designer, for self-actualization and gives self-confidence. See, I can do different things, like another machine as seen outside. Yes, I can do this, too. There is no problem in doing this. Because it gives a self-confidence to the designer for being able to do something that is not known before. In case it succeeds, you get happy.

Seeing the product on the market has many dimensions. One of them is to have the ear of third parties. Olcay briefly explains the situation as follows:

[30.7] Working for years and producing a single product and trying to impress many people is one of the important sources of motivation. Everyone wants their own idea, own drawing to be released at the end of the fifth year.

In addition to this, he asserts that the most important thing for a design team in terms of reaching the goals is to exhibit the product at an international fair, rather than to see it being sold on the market.

[30.52] In my opinion, the reward for a studio which designs a vehicle is the exhibition of the concept designed in a (international) fair such as this.

For Nesrin, the point where she thinks that the process is over and feels proud to be a part of that product design process is when the final prototype is being photographed for the product catalogue.

[21.15] At the end of the process, the good thing about the job is this: if a product was released successfully, the photo shoots are made on time and the photos start arriving. They start to send them to us through Whatsapp groups, then you say *'how nice, it's over now, it really happened'*. There some people

who use those products. Being photographed, you know they will reach somewhere. That moment is really good, an enjoyable moment.

She also states that '[21.9] she surely felt very happy when she watched the TV commercial of the product she worked on for a year'. As I indicated before, to see the product on the market makes people feel pleasure and turns out to be a catalyst that motivates people keep feeling the same way by being a part of a new project.

For a design manager, Berrak, witnessing the whole process of a design from the brief to the prototype creates an emotional bond that helps her tolerate the inconveniences during the process.

[32.12] If I don't enjoy this job, maybe if I don't see a product in the end – because I see the birth of that product...We experienced all that process together, that emotional satisfaction point can help me tolerate a few points like this.

When the product is sold on the international market, reaching the goal becomes something bigger, because it turns out to be a nationalist attitude to support the recognition of the economic growth of the country. Here is what Çağatay feels about this situation:

[29.7] When we produced the first bus in 2003, we sold more than a hundred busses to a firm abroad (...) When I saw the vehicle we produced, while running in the market, I wept. I mean, because when somebody designs something one by one, or produced the product with great difficulty... Because all the outer body of the bus was sheet metal until then and became composite. There was no supplier for composite in our region. You strip down, put on the work outfit, organize the engineering team of the supplier, have it produced together with them, take the product and install it on the bus. (...) [29.9] What I enjoyed was that the criterion I care about in the success story is defined: if the product you made becomes successful, if you can see your product anywhere in the world, you become happy. I also love this vision.

This interpretation prevails with the findings of Sauermann & Cohen (2010) that to contribute to the success of a team or organization is a motivational factor for engineers in R&D. Being highly motivated to see the product on the international market, Çağatay motivated his team by setting the same goal for his team to make them feel proud to be a part of it. This is the point where the design manager tries to trigger passion among his team members towards being a part of a creative team by making them experience the pleasure of seeing the product on the international market.

[29.11] We went to a fair in Germany in 2015. We saw a bus in there that we produced in 2004. It took us from the fairgrounds to our hotel. When boarding, I told the team: Gentlemen, I'll tell you something... I said: 'We made this vehicle in 2003-2004'. I explained them every part of the bus one by one. I explained the errors we made in those parts, etc. I said: 'When we see the trucks of our company abroad, then we'll say we made it. We continue until then. We have no other choice. I mean, the vision I'm trying to provide is also this. The works I want to do is this. I mean, what did we do? Where have we taken it? What have we become? Hah, its name being mine is not important. Its name being someone else's is not important. This is a national thing.

Another point about reaching goals is the correlation between the complexity of a design problem and the amount of pleasure gained from seeing that product on the market. For Olcay, the pleasure gained from the design of a glass and a car differs a great deal since the pleasure increases parallel to the increasing complexity of product.

[30.55] I'm doing models with such large budgets, and it gives me huge pleasure. I see the prototype of the product before any other person and put it in front of me. I drive it with three other people, I mean even before its molds are made. Therefore, I think the size of the work in itself also provides something, a pleasure, you know. That is why I said at the beginning, I am enjoying this more than someone who makes glasses. The person who makes glasses also loves it much maybe, etc. etc. But the investment you make on something and seeing the results goes in parallel with me with the pleasure obtained from it, I mean upwards.

As seen from the excerpts, there are many different sources of pleasure that help actors feel motivated during the collaborative design processes in order to reach their goals.

This is very important for the actors to keep working willingly because they want to sustain the feeling of pleasure at work. As Çağatay indicates, pleasure and success are so intertwined that they both help loving what you do and doing what you love in return.

[29.67] The philosophy of life is simple, I mean I live simple. I live happily. Try to enjoy, I love what I do. I enjoy my work more when it goes abroad. I enjoy it when the projects we prepare teach a friend something. I enjoy it when my team does something. I mean, I'm telling you sincerely.

Therefore, setting goals and reaching those goals is one of the key factors that trigger a high degree of intrinsic motivation. Reaching the goals is a catalyst that motivates people to be in the flow of *'the creative spiral'*, which is composed of purpose-product-pleasure-passion. Here the purpose is to see the product on the market. As a result, when an actor reaches this goal, she feels pleasure. In order to feel that pleasure again and to be satisfied with the job, the continuity of this pleasure by setting new goals and achieving those goals can be evaluated as a motivating factor for individuals to keep creating passionately.

Meanwhile when the goal is to see the product on the market for a complex design problem, it sometimes takes years to reach that goal. In this case, it seems hard to keep participants motivated along the process. As a solution for the loss of motivation because of long processes, both managers and employees suggested that it is better to set sub-goals to make the team feel pleasure by reaching those goals. It also makes the team members feel close to the end by accomplishing each step towards the end successfully. This is what I named *'continuous progress'*. The perspective of Çağatay towards continuous progress can shed light on why this issue is important for actors to concentrate on and motivate for doing a task.

[29.23] If it is greater than one, it is acceptable to me. You must have done something. We are moving on a road, if we go a little further than yesterday

there is no problem. But otherwise I just sit on the sidelines like an owl, and just criticize. No!

Continuous progress is about being active and feeling the energy created by this dynamism. Actually, this is the nature of work that keeps actors motivated to move on. By this way, people can feel that they have a contribution to the process and have a legitimate say on the progress. So continuous progress can be considered as a factor that reminds people the value of stepping forwards. Oktay explains how he feels enthusiastic when he sets sub-goals in a long-term process as follows:

[31.8] Sometimes it is motivating to see everything in pieces rather than seeing the final vehicle. (...) [31.7] This time I interrupt the process. I mean, I divide an entire process into separate parts, as if it were not the same process. And I'm trying to focus on those parts separately.... if I consider it like that, I am motivating myself a little bit more about it, I mean, providing my own motivation. I mean I divide the process into some phases within itself and concentrate on the current part and try to provide it.

Actually, every single detail and every piece composing the whole can be set as a goal to motivate the actors towards reaching the utmost goal, the complex product itself. Metin explains his role as a mechanical team leader to set smaller goals for the actors and help them see the results in the shortest time to make them feel successful and willing to keep working with a high degree of motivation.

[14.1] My friend makes one bracket, a simple bracket. Simple for you, but he spent a day, sometimes five. Bring that bracket and say 'see x, my friend, look, the product has arrived' or ask 'have you followed it, did it come, did you see it? Is it done?' That's enough for him. Why? He saw the results in a short time. See, that's why we're definitely getting involved as team leaders.

Another explanation to the benefits of setting sub-goals for the motivation of actors belongs to Oktay who feels working efficiently in short-term projects.

[31.5] Sometimes in shorter local projects, taking shorter periods, sometimes I feel more enthusiastic and I believe that I work more effectively in such projects.

In order to keep stepping forward continuously, monitoring the progress and giving feedback to all actors about it helps them see how far they are from the goal and motivates them by showing in what ways it is possible to reach that goal. In some cases, managers monitor the progress by following a tight schedule to meet the intended timing. Çağatay is a manager who motivates his team members by scheduling and showing the daily progress goals to his team members towards reaching a higher goal.

[29.68] I gave a record number for work for the first month, I said to the management that I will give 52 vehicles this month. And I am absolutely sure that everybody thinks, they are calculating that these 52 vehicles won't be made. Then I said that 49 of them will surely be made, and three of them may have delay, because they are special projects. Some parts of these three special projects may be late. If they are late, they will be delivered next month. If not late, they will be delivered this month and 49 net will be delivered. I figured out that 49 net will be given by calculating. I didn't do anything else. My industrial engineer friend is strictly following the program every day. Will we make it? Yes, we will make it. When we succeed, we will make the first peak figure of the last three years.

Here is how Nesrin is being motivated by the attitude of her manager who continuously follows and reminds the progress to the team members.

[21.1] First of all, the projects where product management never leaves control – very well in-control – are going very well because their task is to push people, push them. There is such a reality... [21.1] Product management constantly reminds all required people of their duties at the necessary times and follow them. [21.2] People need reminders from such people, I mean, pressure from someone. Because there are other tasks that everyone carries out on a daily basis, that is, they have other mandatory tasks, apart from launching series of new products. I mean, someone is required to always remind and direct and push this.

In case of conducting concurrent projects, it becomes more important to follow progress, since it is easy to be distracted when dealing with several tasks at the same time. Another issue that deserves strict monitoring of continuous progress is tasks handled within limited time constraints. In the below quote, Olcay explains how he deals with such a case when there are more tasks to be done than the scheduled plan in a limited time. He follows the progress of the process daily with the aim of doing as much as possible regardless of the schedule he created in the beginning of the project.

[30.41] I think the last 30 days I gave up all those plans, etc. And I started doing something like this. We've done this and this today we'll do that that and that tomorrow. I've always progressed with daily plans like we will do this and this tomorrow, and I continued by trying to do as much as possible.

It is not only the responsibility of the managers to monitor the progress, but also actors who are willing to participate in the process feel responsible to follow the progress of other actors and the process as a whole. Since the roles and obligations during the collaborative design processes are intertwined and affect each other, it is vital for all the actors to keep stepping forward together. Burçin is one of the actors who care about the progress of other actors since their tasks are interdependent in collaborative design processes and the success or failure belongs to the team in the end, not the individuals.

[23.25] There is a problem, for instance, I am awaiting some information and it doesn't arrive. I don't sit and wait for it for months. If it's not coming, I'm looking for a way to get that information. I mean, if the person I asked doesn't give it to me, I ask his manager. If the manager doesn't know, I'll ask someone else.

Completing obligations on time is crucial for continuous progress and affects the work of other contributors, since the work of every actor is interdependent in design collaborations. So, time management appears as a factor affecting the efficiency of the

collaborative design process and motivation of the team members, which will be explained in Section 5.2.3.2.

Burçin also explains that she takes responsibility of her progress because she feels better when she does her best to keep moving, or at least be sure that she does her best to progress.

[23.26] I was like this before: For example, there is something that doesn't move on, I was expecting, for example, let me say in my first years, like long ago, or I was more afraid of something that I didn't know, I mean I was more reluctant about something I didn't know, put myself in more stress, like, how will I do it. Now, I think I've overcome them in my way. If it is something I don't know, I find out how to learn it, I go to the department, person, manufacturer, product where I can learn. When that happens, as a result, at least I say that I'm trying to find it, I'll reach something or not, but at least I feel good mentally. Otherwise, I both don't know and don't do anything, so the responsibility of that, the burden becomes more severe.

Nesrin also cares about the progress of each member and the process as a whole, like Burçin. She is aware that her efforts are not totally separate from the other members' efforts. Collaborative design process is more than the sum of every actor's efforts in the same way as a product is more than the sum of constituent parts. Hence actors can take responsibilities for the progress of the process as well as the managers. She says:

[21.21] You know, how I said product management is the owner of the product; yes, they are. But, for example, there is always something the product department manager tells us: you can harass them, too, so you can suppress them as well. Let's say that the project was supposed to come on this date, ask why didn't it come, why didn't it come, why didn't it come? Because you know, yes, they own it, but ultimately, they and us are the ones who are going to be subject to time constraints. Therefore, of course, we put some pressure.

Even though the sub-goals help actors feel satisfied and motivated to keep working in the whole process willingly; it is not the case for all of them. For instance, the desire

to see the product at the market was so high for Metin that this even made him undertake some responsibilities that he was not obliged to.

[14.15] Now, what do we have to do with the purchase? First, to inform which product to buy, give the sub-specs about it, if possible - which we usually do - to inform the supplier. Now, I did, what was my mission for that? Specifying this, and open a request with these data through the system. An information was provided to me through the system. That person has to do his job. Yes, but is my work over? No. What are you doing? You tell him that I made such a purchase through the system according to the data you received. If you pay attention to these issues, see a separate explanation and say you do not know when to make this product at the latest, or if you do not say anything, know that this product came to you. You're sending mail. Normally something you should not do because the system should work because it is made on the system and then you waited for a mail from the person and no reply came. He didn't say anything. You call and say: 'Mr. X, I did something like this, be advised, ok?' Ok. Three days pass. 'Mr. X, what about our issue?' Five days pass, 'what about our issue?' Six days pass, 'Ah, I forgot about it'. Then do what you do and make it reach me. Sometimes we step in. This also happened: The product has arrived but waits in the warehouse because I did not call. For example, this time you start to track the product, so the procurement doesn't have a responsibility for me until the product arrives here. I see that the responsibility is mine. Therefore, you can run that fast cycle here again. Otherwise I have done this job. If you say it's out of my hands, neither I enjoy that product nor my friend. Why? (...) You have seen the result before you run out of energy. Eh, is there anything better than that?

Continuous progress can be perceived as a never-ending race. It is like being on the road all the time, which can make people feel tired at some points because of the hard work it requires. Yet it is still satisfying, as Nesrin explains; continuous progress gives joy and delight.

[21.16] Of course, the mood then is 'oh my work is too much, my burden is too heavy'. But of course, as you do it and move forward a step, make and go up a step, of course, your happiness level, pleasure level increases more and more.

Continuous progress is not only a factor related with individual actors. It also has a dimension related with companies as well as the managers and the employees, as Çağatay relates:

[29.13] Otherwise, I rather not come to work in the morning. I don't want to come to work. I mean, if I'm not going to do something new, if we don't have a goal, if we do not produce something different, there's no point in me being in production or in the project. Because when you stop, someone will pass you. I mean, this is the rule of the project. I've always learned this way; I've always made it so. If we said that this is the last machine in the world, we're not going to do anything further than this. Ok! Then let's quit. You don't need any more. See, there is no need for an iPhone. iPhone 3 was enough, we're talking iPhone X right now, so there was really no need. Olcay, it was something spectacular, or when Graham invented the phone, it was supposed to be over. I mean, if that's the case. That's what I've always been trying to tell friends from this point. If we don't have a different product than last year, someone's passing us.

This quotation well illustrates the shared source of motivation for both the employees and the companies they work for. Companies and employees affect each other. In light of my interview data, the employees' progress is intertwined with their companies' progress. As Berrak explains, this joint approach of internalizing the need for continuous progress establishes a bond between employees and their companies. She says:

[32.13] If you really feel the strength and size of the structure you are in, if you feel that all the steps in between the process contribute to you, it keeps you in there (in the company) somehow.

Thus, continuous progress is a key factor that helps people feel motivated during collaborative design processes to keep walking on their path in order to reach their utmost goal – the product to be designed. The last and critical dimension of reaching the goal is to be prevented from reaching that goal. Especially when the same design problem is given to a few different actors and one of them is being eliminated in design evaluations repeatedly, it becomes very demotivating. As Olcay says, this is a point that has to be managed very carefully to overcome the lack of motivation.

[30.8] Assume that, for example, that one person's design is liked three times in a row, or assume that it makes a difference to others, assume it's farther ahead than the others. This, after 2 times, 3 times, sometimes 10 times – depending on the concern of other party – the losing party searching for another way is highly possible in this job. Therefore, there is a circulation. That circulation is one of the things that design managers try to deal with.

However, some people are not being demotivated as a result of the elimination of their ideas while making design decisions over and over again. Oktay indicates that this is the case for people who mostly focus on money they gained at the end of the month, instead of work satisfaction. He says:

[31.26] If we think of it as a football player sitting too much in the bench, it could be a football player who is happy to be sitting there, it could be a person who could make money by sitting there. But if a designer wants to work actively, he usually goes for a job change. I mean, there were those who made such decisions if they are not selected, if they don't feel competent in such regard, they can switch to another sector or another company.

Ayberk explains that actors may face the elimination of their ideas recurrently as a result of the belief that their contribution is not worthwhile for the managers. This results in a decrease in motivation and not working on the project with enough concentration to reach the target goal.

[34.5] This was a big factor for me personally: believing that the project will be actualized. If I don't believe in it, that project was turning into suffering for me because you do the project and it's canned, you do the project and it's canned, you do the project and it's canned. Sometimes this happens even in very simple projects. Eh, this causes serious lack of motivation for me.

In some cases, actors have to work on projects where they do not feel satisfied with their performance. It becomes harder to reach the goals in this case, as Burçin experienced and expressed below. She explains the vicious circle caused by feeling inadequate to reach the goal and demotivation it causes as follows:

[23.21] For example, sometimes about yourself, I mean there is a lack of pleasure due to not being able to do something, lack of motivation. I mean, you're really unhappy when you continue on with something you don't believe, or when you can't figure it out. Because you know the coming period from your experiences, it will not go very well. Of course, there is a way of failure.

To sum up, as Amabile and Kramer (2011) suggests, small wins help ignite joy, engagement, and creativity at work. This is why setting smaller goals in long term projects provides people with feelings of satisfaction, joy, and success, and encourage them to keep walking on the path toward the utmost goal; to see the end product at a market, fair, advertisement, etc. Regardless of the time spent to reach a goal or the complexity of product, reaching a defined goal makes people feel joyous and keep moving on the same path of the creative spiral, which is crucial for working with highly motivated people.

According to my findings, in terms of motivating people towards collaboration, reaching goals by continuous progress is vital since the success of the product depends on the performance of every actor working in the project. As a result, both managers and workers feel responsible for the progress of the process with the contribution of every actor concurrently as a whole. Otherwise, the process may get stuck at a point.

Therefore, in terms of motivating people towards the task at hand, continuous progress can be evaluated as a key factor. Setting sub-goals, monitoring progress, and giving feedback about the progress keep actors dynamic during the process until they reach their goal. Additionally, if actors devote themselves to see the end product, they are more likely to collaborate since the complexities of design problems they face exceed their individual potential. Therefore, believing in the task can be analyzed as a factor that may motivate actors towards the task at hand, which will be examined in the following section.

4.2.3. Believing in the task

While interviewing experts from diverse professions in the first phase of this research, we focused on a specific project that design managers selected. Those projects were prominent for some reasons, such as seeking a new production technique, a high degree of complexity of the project, being the first product designed on its category, and so on (see Section 3.4.3 for the detailed reasons to choose those projects). Since the projects were to some extent challenging compared to the others for some reason, I heard many times from different actors about their curiosity, joy, excitement, and desire to be a part of that project.

In addition to this, in the second phase of the research, after talking about a generic collaborative design process in the company they work, I asked the interviewees to remember the situations where they were highly intrinsically motivated. After that, I wanted them to remember the cases where they felt demotivated. Even though we did not choose a specific project to talk about in the second phase, they had a tendency to talk about the projects they believed to be worth spending time and energy for some reasons, as in the first phase of the research.

Thus, based on these expressions, I realized that '*believing in the task*' has a significant effect on intrinsic motivation of individuals towards '*the task*'. Interviewees used different expressions and wording, such as to enjoy the task, to desire being part of the task, to own the task, to work on special/challenging projects or routine projects, while they explain how these factors affected their motivation. Since these are all related with their belief towards the task for different reasons, it is hard to make clear distinctions between what they explained only based on the wording, so I categorized them all in the same heading as '*believing in the task*,' trying to combine their feelings about the task under an umbrella term.

This section will deal with the factors affecting task motivation in relation with the actors' beliefs towards the project. At first, I will set forth what happens when actors believe in the task and in what ways it differs from other projects. Secondly, I will explain which features make actors believe in the tasks and why. Thirdly, I will identify what happens when the actors do not believe in the task and after that, I will set forth the reasons why. Lastly, I will explain how actors can be motivated towards the task.

To begin with, Damla directly expressed the link between believing in the task and performance as follows:

[24.7] If the person has owned the project, then the teams can work in a more motivated way.

Burçin explained in detail how the process proceeds when she believes that it can be done in a way and she will do it, in relation with reducing stress with the help of her belief and experience at work – which is 13 years in her case – as a designer.

[23.22] If there is something that doesn't work, I stop there. Okay, so yes, I can't move on here, I'm getting help, I believe in something, I mean it will happen somehow. So it will happen. But I'm trying to find a way for it, get information from someone, go somewhere, see something, and investigate it, whatever. I'm doing those now, so I'm relieving my stress, the pressure I put on myself. And I know that everything will actually reach a point. I mean, I'm saying that previously, a lot of things went negatively, but in the end I did it somehow, I will also do this. There is surely a way to do it. When there is no way to do it, I do not do it anymore. I say I have to do something else, so this is not the solution for this. I'm going for another way. Maybe, as I said, it could be a little bit about work experience, life experience.

This quote reveals that belief towards the task or solving a specific problem can be considered a way of coping with chaos during complex collaborative design processes. Additionally, when people believe that there is a solution for the existing problem and they believe their potential to find it, this belief turns out to be a factor that triggers

actors to find out new ways of making it happen, even if it does not seem possible under existing circumstances. Çağatay says:

[29.87] If I want to achieve something and I believe it, I have to solve this. Because I have no choice. But there were times where senior management did not share my belief. I put it aside to bring it out when it's time. (...) [29.89] While I was working at another company, I solved a project that the purchasing director refused, with the CEO. Why did I solve it with the CEO? Because he (the director) said no to me and I believed in this. For something I believe in, I told my general manager about it, and my general manager said CEO will come at some day, and told me to prepare this as a presentation and bring it to him. I said the director does not know, he would mess me up, I said it loud and clear. He said don't worry about him, he can't say anything. And he called me to a meeting. He said that I have a presentation and told me to present. I did the presentation and came back.

In case of Çağatay, it is obvious that believing in the task is a factor that can force the limits of individuals as well as the hierarchy in the companies. When people believe in and own a task, they take more responsibility than they are obliged to in order to make it come true, as in the case of Haldun:

[7.6] We are the owners of this business. Firstly, Mr. Serhat is the owner of the project and then me; we are the ones who care about this problem. We go to every department and knock on the door. 'We're not available' at the moment. Let's see if you're available today? If we do it tomorrow, or in the evening? We'll see, all right, ok. They are also busy because their production is in a hurry to produce products in series. Purchasing already has a lot of daily work. Let me say that they support us.

Like the case of Metin, following the progress of the process step by step even if he is not obliged to, Haldun feels responsible for the progress because he is the owner of the task, he believes it, and he wants it to actualize. Except for the managers, employees value owning a task, like Bekir, who explained his experience on a task he enjoyed and accepted as a designer as follows:

[34.15] When I like the project, I approach the work in a more disciplined way. Since I accepted the work, I can say that I work by experiencing processes more. Other way, an evasion happens. Sometimes even let me say that I have done something in some of my projects, I mean, I'm doing it so much rotely so that I tried to do so that I had projects done even by dedicating a quarter of the project period.

Saying this, Bekir underlines the positive effect of owning the project on the effective conduct of design processes. It is useful to understand this connection to shed light on the emotional aspects of design collaborations. As a similar example, Haldun explained the relation between emotions and effective conduct of the collaborative design process, which is as important as the systematic design methods. He says:

[7.12] Here it is the teamwork, the work of believing, that is also important. It is not just the process, but the process disciplines it. But apart from the process, the competence of the people there, their belief in this work, racking their brains on it. So, you play with that form, but play according to what? Even when he doesn't like it, he can move on but, he doesn't. (...) The (systematic design) process disciplines here, sometimes the process is overwhelming even.

The following two quotes clearly present how people work passionately, take responsibilities and initiative in order to create what they believe. Çağatay and Olcay learned new skills during the production and exhibition of the projects in which they were the managers of those processes. Çağatay explained his experience on producing the fiberglass parts of the products by himself in order to be able to produce what he believes although the people who are responsible for mould production could not do it, as follows:

[29.91] One of our vehicles has four-five sharp lines. They are lines that cannot be made with fiberglass. I worked for four days at the mold maker for this. I worked myself. I made the mold of this myself.

Similar to Çağatay, Olcay described his experience of fixing the broken parts of the product to be exhibited at an international fair with the help of a colleague and online support of electronics engineers at midnight.

[30.45] The truck driver arrived at night; we opened the boxes the next day. No headlight or lighting element was working. All of them somehow were broken. I have never made a solder in my life, but we opened all the headlights there, we learned how to make a solder and welded them there in the night with the help of a friend who is an electronics engineer. Only one person came to work with me, we made solders as two people up until the morning, until the headlights were operational.

In case of Olcay, it is not only passion or belief towards the task that makes him fix the broken parts the day before an exhibition at an international fair, but also his responsibility for his company and team members. However, the point to be considered is that he did it not because he was obliged to. He did it because he *wanted* to exhibit the product that he felt *proud* to be able to create and exhibit at an important international event.

Believing in the task that someone is working on brings along defending what that person does. Berrak's account illustrates this:

[32.4] If the product manager believed in that project greatly, he goes on to defend it. In fact, he needs to prove it and is struggling to actualize it. Maybe if he had something that he didn't believe in, he wouldn't insist on it. This is your mastery of your product, your mastery of your work, your mastery of your product range. In fact, all you do is the result of the domination of the process that you manage during your time there.

From a different perspective about believing in the project, Damla explains that she evaluates the quality of a designer's work with her *belief* towards the design solution she offers and the support of her ideas.

[24.27] If he doesn't trust the product, he can say, for instance, 'ah, is that so, then what do you want, I'll change accordingly'. You know, between the designer who trusts the product he designs and the one who doesn't, he can do a one-eighty when someone starts to criticize it. There may be such designers, for example, working with them, I mean (a displeased voice tone) I mean if the designer designs a product he cannot back up, I mean it means he doesn't design a correct product.

Drawing on the above quotes, it can be suggested that believing in a task brings about a high degree of motivation towards the task regardless of expertise and position. Now I would like to set forth the qualification of the tasks in which people believe and devote themselves to work on. A distinctive factor that many interviewees mentioned is the extent to which a project is innovative. The following quote presents what Bekir indicates about this issue:

[34.13] I can say that as the possibility of an innovative approach increases, my acceptance of the project increases. [34.14] It is important that I have fun while doing this.

Like Bekir, Damla also said that success comes through enjoying the task as follows:

[24.48] The more you enjoy a job, the more successful you are in that job. I mean when you go or do a job that you do not enjoy, that job already results in failure.

Damla also states that she enjoys the projects that require high amount of creative skills which can also be futuristic in some cases.

[24.29] The more the project releases your creativity, the more it becomes enjoyable, let me say. For example, if we are designing something, if we are talking on a platform where we designed the vehicle of the next 5 years, next 10 years, then everything is more enjoyable. Because what happens, you can use more future oriented technologies, you can predict the use of vehicles. These are actually the things that affect the design, the values that make up certain points of the design. These make the job more enjoyable. [24.30] You really enjoy yourself more in futuristic projects, because you use more active creativity there. In other projects, the production methods that determine your decisions, the use of the material, like the more the criteria that restrict you, the more joy you get from the job or the project changes.

The stories above show that designers enjoy projects where they feel free to create with the least limitations possible. This may be related with the budget of the project, segment of the user, or target launch time. Olcay expressed such aspects as follows:

[30.54] What makes the designer happier, motivated, and makes its circles happy is the new project, the new excitement, a hard project, the more opportunities and more money to be allocated, and me using a bigger budget to do it.

Another factor that motivates people towards the task is to work on a totally new project which can be challenging in some ways, as Metin explains:

[14.17] You say that in the product that I will create a new design language belonging to the company. I will make the design studio, especially the industrial design, that is to say the presence of the design studio felt. You say that I will reflect the view on the world, on the company, the view of the designer in this product. I mean, this is a great opportunity. For the first time, you have a say in the whole of the vehicle, not locally specific things, but throughout the product. This is something awesome. That's enough for us. Here you say that you decide that in all of these tasks, the step I took here is the first step of the steps I will take from now on.

Like Metin, Erman explained that motivation is related with working on a totally new task and he relates it with the contribution of all the actors to every process:

[3.17] Because we tried to do something that we didn't have here once, in every department that we had a relationship with, the head of that department and everyone attended all these meetings. So, for example, if it is a standard product, a standard size, because ultimately we have to manage the time of each of these works - it is so for every department - we have to manage well the time of the people who are the head of each departments. I mean, time is also a resource we have to manage well, the person in the lead does not have to attend these meetings when evaluating a standard product [3. 16] But, for example, everyone in this process, including the people in the lead, came to this work by believing in this process, participated in these meetings, there were times when we had a fight, there were times when we laughed, that is so...

When a task involves strict time limitations and a high degree of responsibilities in relation with the number of the actors working on it, a remedy to handle that situation is to create a team who deserve being a part of it. The interview data shows that a high amount of intrinsic motivation which is triggered with the belief towards the project

can result in unbelievable and beyond-rational experiences and results. Here is Olcay's experience about the issue:

[30.32] The projects which involve innovation, and it is apparent that very few people do it... Therefore, the amount of responsibility per unit is very high... We received 3 proposals from 3 very professional companies when doing this job and they told us they cannot give an offer in this time period. I mean they told us this cannot be done in this time period. I am talking about something which includes such challenge, making the impossible. To make it possible, you should take at least 5-8 design decisions during the day and spend millions of prototype cost. No one told me to stop. It was so fast. It will not come to you too often, but accommodating such things when completed... (...) [30.38] When we presented this project idea to the assistant general manager, he told me – the person who will give the money, I mean – ‘we can give 100-200 more, so we can have a company do it’. After that, I said no, we'll do it. Then we left and I came down. The team that I was going to do this job - blue collar, white collar friends - asked what happened? I said, they offered to give 100-200 more and have it made outside. Then they said, "What did you say?" I said we'll do it. After that, they got up and went away, frustrated. I mean, the situation is this. If you see these kids, they're the people who would give the same response. I mean, because [30.38] they desperately want to do this job. I'm talking about such a team. [30.43] In fact, those men who were frustrated were still smiling. Because they already knew that I would give that answer. And as I said, if that their opinion was asked, they would have made that decision again. I mean, [30.43] they really felt like they were the owners of the job. That's the reason.

So far, I have presented the findings regarding how people feel a high amount of intrinsic motivation deriving from their beliefs regarding owning or enjoyment from the task. Now I will put forth how the interviewees explain the reasons of their demotivation towards the tasks and the results of that situation. As I discussed above, if people are motivated to be part of a project, if they are willing to contribute, they devote themselves to do their best. On the contrary, if the actors are not willing to work on that task, they just try to finish it as soon as possible to get rid of its responsibilities. At this point, regardless of whether the actor is a manager or an expert in the team, their performance goes below the expected limit. They do less than their

potential and capacity as a product designer in automotive sector, who is responsible for three-dimensional (3D) modeling, Oktay, explains:

[31.22] For example, if I'm doing something about 3D modeling, (I may act like) let me do and finish the 3D modeling. The rest does not concern me. I mean, let me just finish it as soon as possible. If you don't believe the work done, it is like let me do what I can do within my boundaries, let me finish it. And then other friends can think about it after I finish that process. Work can progress like this sometimes. If you do not believe in the work you do and you have to do it, there can be such an output.

Like Oktay, Tuna says that he can create in shorter periods if the task involves novelty, whereas it takes longer to work on styling projects because he does not want to do them.

[35.2] Aesthetic projects, believe me, you do them in a week, because of the lack of motivation, you can even do them in 2-3 hours. But in innovative projects, in adapting the different ideas, you can make 10 pieces in one day, I mean, I think so.

Olçay believes that commitment towards the task is interrelated with the number of collaborators since every actor will contribute a bit of it.

[30.29] In the last truck, this team with 1500 people, and no one feels so much loyalty to this product. I designed it, my team designed it, but still so many others have touched it from other departments. Like I said at the beginning, it won't be the way I want it but it won't be the way anybody wants it. It's going to be a little bit of what everyone says. When this work is a little bit of what everyone says, I think it's getting harder: I think this work is getting harder, I mean, commitment, commitment to work.

An important point here is that Olçay expresses the difference between two projects he managed, one of which he feels less attached to because of the amount of responsibility given as a result of the large team composed of 1500 actors. In another quote above, which is labeled with number [30.32], he expresses his excitement and passion towards the project where a small group worked under strict time limitations

and a huge budget, where some professionals believed it was impossible to complete the task in the given time. From these quotes, it can be said that intrinsic motivation towards the task is related with the number of actors in a team because it affects how much every actor will contribute to the task, which also affects their commitment towards the task. Attachment can increase in line with the amount of responsibilities when the actors believe in the task.

When people do not believe in the work they do and are not eager to even follow the steps to finish the task, it is hard to reach the goals even when the task involves only mechanical skills, such as preparing the technical drawing of a part of a designed product. An explanation of how the collaborative design process proceeds when people are not motivated or willing to work on a task can be read from the excerpt below from a product development engineer, Burçin, about her design manager who was unwilling to conduct a project that she was obliged to:

[23.11] There was a project: that project was given to that friend later, for example. She doesn't know the beginning. I mean, she got it later. In fact, she doesn't believe the project is going to be any good either, as a product manager. But a brief was given and needs to be done. I mean, it needs to continue. For instance, she is not really paying attention to the project in the process. I mean, normally, she's supposed to take his notes and send them, she doesn't send them often. I'm asking why you didn't send them. She says "I don't like this project, you know?"

Since creative professionals – no matter whether they are designers or engineers – enjoy working on tasks that involve high amount of creativity, which are in most cases risky, they have clash of ideas with other departments and actors who do not want to go beyond their routines. Bekir says:

[34.3] In some cases, the fact that R&D does not want to take risks is making things difficult. Because they will try something new, it will be a costly, time-consuming process. They will try and fail, try again and fail. They don't want to get into such a process easily.

Under these circumstances, the process becomes demotivating for creative individuals since they are pulled to stay within the given boundaries. In a similar way, Çağatay observed that recurring routine tasks that follow similar patterns can be a reason that makes actors feel demotivated.

[29.30] In repetitive things, people are much more likely to make mistakes. When someone creates the same thing, the same project many times, she starts to work blindly. She doesn't pay attention, doesn't read the specifications, doesn't look at variabilities, so these are the things we've been through a lot. That's why they always say that Brother Çağatay is a good, nice person, but a bit problematic, they say (laughs). Already their grumblings about how he has to deal with some things every time, etc. are being heard.

Olcay's observations and concerns about working on routine tasks which do not require a high amount of creative thinking skills is in line with Çağatay's experiences. He says:

[30.47] The great things you have done can be a source of demotivation for the team. Because now it's time to do a very small job, an ordinary job. I mean, this is because they also have to design some place in a corner of the truck, and has to do it often. Now that we've come to find his motivation, that is, the man who was the star of the fair two days ago. Today we have to do something else and we want him to feel the same way. But I don't have any plan for that right now. I don't know what I'm going to do right now.

As Olcay notes, it is hard to motivate people to work on a routine task passionately even they are passionate about working on special projects. At this point, it is important to find ways to make actors feel motivated towards even the regular tasks. A solution to this problem was offered by Berrak as follows:

[32.14] How do you make a person own the job? There's this, the key point: you're opening up channels that show what their work serves. I mean, you give him a job, he maybe stays all night for 3 days straight, works his head off for 3 days. Then, at the end of those 3 days, at which points and stages is the payoff? I mean, what part of a big mountain did he create as an ant?

Additionally, since there are sub-expertise areas within specific disciplines – such as idea generation and 3D modeling for design – managers benefit from these sub-categories to distribute the tasks according to the actor's area of interest to motivate them. Damla is one of the design managers mindful about this issue:

[24.32] Like, I'm paying attention to that if I'm going to talk about my team, I'm trying to direct people to the jobs that they enjoy the most. You know, for example, some friends enjoy modeling. I direct them to the modeling part of the job and do their scheduling over modeling, I mean those plans. Some of them have a lot of fun in the sketching stage, so I'm trying to give him the sketch job. The other, for example, has a lot of fun in determining creative ideas, is more creative and contributes more positively to the process, for example, creative idea or what it is called, the visual-project afterwards, in the end there is presentation visualization, for example, we use the team with them. I'm trying to distribute the tasks like that, the most motivated...in fact I am trying to adjust this, the motivation of the person and the will to do whichever job, I am trying to direct to that and try to manage the team that way.

Oktay, another manager, stated that he prefers to give a different task to his team members for a while if they feel demotivated about the task they work on.

[31.9] When the motivation is low, I usually expect to change some things, so if I'm working on a truck project, for example, I'm trying to give something to do with another job so that the motivation increases...a bit of crossing the thing at hand a little.

Çağatay, as a production manager, states that feeling bored of regular tasks is a problem for him, as well as his team members. He has two different strategies to solve this problem. He either prefers to finish it in the shortest time or make slight changes in routine.

[29.29] The standard package always bores me. Every time – even when I don't change anything – the fender is the thing I play with most on the truck. What do you say if we build a fender like this and apply it on that truck? I mean, that truck is the simplest project. When you discard this, that truck you don't like turns into a bit more exciting truck. I'm trying to ensure that as much as possible; if not, we're getting a quick conversion from the standard package, I

say continue without wasting time. Because when he's stuck, it is wrong to keep that person there, this time [30] In repetitive things, people are much more likely to make mistakes.

Canan shares similar concerns with Çağatay as standard projects are demotivating for every creative individual. In this case, she offers her team members to do the task as expected but create also what they want in the meantime to satisfy their creative skills.

[22.28] For example, sometimes it happens in product development, products also come with a lot of description, here, shorten this, add something here, add a cupboard here. Now the designer doesn't want to do that. She's like an operator. I say, ok, you draw that, there's nothing anyway, you suggest one, too. It's important also for the vision of this place, because the expected project is easy; and it's also important to make them feel being part of a design process.

As another manager, the solution that Damla finds to cope with the demotivating effect of routine tasks is to give free hours to her team members to create whatever they want, no matter if they are related with the company's production line or not.

[24.35] For example, you know we are always designing vehicles. We go by not always designing vehicles. Let's design something different one day, half a day a week, but we go through what you get. You know, this does not create a job, but these are things that strengthen the creative idea. That's something I've done entirely in my department. Otherwise it's not like the whole company works like that. Because I'm bored too. You know, what do we do, for example, the last two hours, turns into let's design something with a container. Or what would it be like if there was a web cam where I used our design language? Like that, let's just say we're having fun with such little things. If we do not go on like that because always vehicle always vehicle, it is really boring for everyone, I'm bored, too. I want to do different things, that's how we handle it.

In sum, the tasks that actors believe and devote themselves to work on most likely to result with success. However, this cannot be the case in every design collaboration. Regular tasks that involve mostly mechanical skills and a low amount of creative skills are a part of design work in companies as well. Under these circumstances, managers try to find ways to motivate people to work willingly on every project, but differences

will still remain between the projects that people believe and the ones they do only because it is a part of their job. Since the focus of this thesis is '*creative design collaborations*', it is obvious that novelty and demand for innovation are triggering factors that make creative individuals work eagerly on the tasks.

Apart from finding solutions to the demotivating effect of dealing with regular tasks, every aspect of belief towards the task is pertinent for each actor contributing to collaborative design process regardless of discipline and position in the company. Employees did not state any experience on how they keep motivated in regular tasks. It is only the managers who seek for ways to increase their team members' motivation even in regular tasks. A reason behind this situation may be the evaluation of the job as something to be done for the employees no matter if it is delighting or not, for the sake of their salaries. However, managers care about the motivation of actors since a high amount of intrinsic motivation is related with the productivity of actors and efficiency of the process. Believing in the task or providing some reasons to enjoy, own, or desire to be part of a task are vital since it is a critical factor that increase the actors' motivation towards the task. The point to be considered here is that the belief towards the task is related with the motivation of individuals primarily towards the '*task*'. Like the prior themes –being passionate about the work and reaching goals by continuous progress – believing in the task is related with motivation towards collaboration because of the need for collaboration in order to actualize the task. In the following section, I will explain another factor that triggers passion towards both the task and collaboration, which is continuous learning.

4.2.4. Continuous learning

During creative design processes, actors continuously learn something new; we can address this process as doing things in a way that have never been done before. My findings show that this process itself triggers passion since it relates the design process with the passion of learning. We are all born curious, passionate about learning and

discovering. Design processes nurture these feelings by their demand for novelty. Continuous learning is different from continuous progress since progress does not have to include learning. Progress only refers to any step that makes the day/moment different from the previous one.

In the data analysis, continuous learning appeared as a theme with two dimensions which are (1) '*learning from the process*', which is related with individual actors and can be a triggering factor that motivates actors mainly towards the task at hand; and (2) '*learning from other actors*', which is related with all the team members and can be a triggering factor that motivates actors mainly towards collaboration.

I will first figure out the contribution of continuous learning to the *passion* of actors working on a creative product design during collaborative design processes. Passion towards learning turns out to be passion towards the task at hand, since it paves the way for searching for new ways of doing things; new materials, new production technologies, and becoming familiar with users from different segments. Secondly, from the interviews, I will set forth the relation between questioning things and learning, which also serves to increase the motivation of individuals towards the task at hand. Thirdly, I will explain the importance of creating an environment where actors feel free to question things that enables learning from others. Therefore, it will be evaluated as a triggering factor to motivate people towards collaboration. The last dimension of continuous learning is the effect of making mistakes on continuous learning, which is related with both motivation towards the task and collaboration.

Firstly, '*passion towards learning*' is intertwined with '*passion towards creating*' during design processes. According to the participants, while working on a creative design project, actors are continuously learning new things in search for new solutions to existing problems, as Mehmet, a design specialist working in construction machinery sector, explains:

[11.2] The new project always adds a separate, different information. For example, each of our machines has a different function. ... that is of course because there are different branches, so it adds on our knowledge. For example, there are differences about their system. Then there are differences in their features. So, this always comes to us as a plus. It comes to us as information, so I believe that the new project always adds information.

Damla was one of the interviewees who indicates learning new things as a source of motivation, which even makes her work during her leisure times.

[24.25] I really enjoyed working in the vehicle we made from scratch. Because I learned something new every time. I mean, one of the things that triggered me was actually - one of the things that triggered me as a designer, maybe it's a purely personal aspect - learning something new, it really triggers me. You know, if I'm designing that part for the first time, then I'm working with something much different, you know. What I call working with enthusiasm. I do more research, more focusing, more sketching, more analysis, you know, sacrifice more personal time, work that way. Because I always work with the desire to find the better, my process there is more enthusiastic. But if I have designed that piece before, then I can act a little distanced to that piece (laughs).

Learning during design processes is sometimes related with searching for new materials or using an existing material in a different way, as Nesrin does. She explains how excited she feels when she meets a new material for the first time.

[21.13] Having found a new material, having tried it, this is a very exciting thing for me. For example, when the performance goals are set, I specifically ask for them to be available and give us time regarding these. This is very pleasant for me. (...) [21.14] We see something abroad, for example, we look for what it is, we look, we look, we don't know its name, we don't know anything but we find it somehow, then it comes. Even when opening that package, the moment we take the first thing from it in our hands and say 'look it's arrived, etc'. Even that moment is very enjoyable.

In addition to this, Nesrin also prefers to work on product designs for different segments just to be able to support continuous learning since different segments requires different knowledge – such as the use of materials – and design solutions.

[21.5] I said that, next year I want a project that will also add something new to myself. A more difficult project - up-segment projects often are more difficult - I said I want a project like that. This was taken into consideration, for example, now I was given an up-segment project. (...) [21.6] I'll probably say next year 'I'm going to go into some eco segment products'. Everyone has such expectations; everyone wants to change.

Research shows that allowing employees to select the problems that they are interested in – as a result of the demand for developing new skills and learn something new – increases their intrinsic motivation (Gagne & Deci, 2005; Hackman & Oldham, 1976). Nesrin's experience explaining the positive effect of being able to choose the project on intrinsic motivation shows that the situation is pertinent for design collaborations, as well. Amabile et al. (1994) find out that people who feel highly intrinsically motivated tend to select work assignments that can result in developing new skills, be more creative, and become deeply involved in the task at hand. It can be also explained as the effect of an autonomy-supportive environment created in a company, which will be explained in detail in Section 5.1.1.

Another product development manager working in the same company with Nesrin, Burçin, explains that the company is fond of continuously making changes in the segments that the designers work because it supports the self-improvement of every actor through working with different materials and the search for new ways of doing things.

[23.24] In general, we do it like this: You know, I said in the beginning that we have segments. So you can think of it as that; the higher the segment, the higher the material and information detail. They give this alternately, so if it gives me the lowest segment every year, I won't be able to recognize new materials, because I'm always doing something with what is available. Thus, for example, we also demand it from our manager. I say that this year please give me something in the upper segment, I will improve myself on the new material, the new product. You know, in that sense, but we don't have a thing, I mean it changes. So, already their main expectation is to improve ourselves.

In case of Burçin, changing the product segment that a designer will work on is not related with autonomy. However, it is related with the demand of the managers from the employees to improve their skills and knowledge.

Another example of an actor who feels motivated in projects where he learns something new is Bekir. He is a design specialist in the home appliances sector. He also relates continuous learning during creative design processes with its effect on owning the project, which can result in doing more than expected.

[34.6] This is also a motivation: for example, a different product comes. You start to learn from there. That's also a factor: learning something. I experienced something different, I did project management, I brought together different people, I personally played a part in the construction part most of the time, like connecting the electronic cards, dismantling and assembling the parts. This was a pleasant process for me to learn, I learned a lot. (...) [34.11] Apart from the project that I am constantly attending to, there is something different, which is directly related to learning, and you are open to a different experience there, then I own the project more.

Tuna, who also works in home appliances sector, indicates that he is being motivated through learning because he loves doing research to support his design ideas in light of scientific information.

[35.7] It was very enjoyable because it was something I did not do before, and research - I usually like researching - I would like to have a scientific basis for my projects. Not just foresight or subconsciously, but I try to show the results of the research at work and somehow where it came from. It's more acceptable. This motivates me, for example, learning something.

From the interviews, it seems like creative design processes offer a desirable work condition for people who are passionate about learning, since they involve and require continuous learning. From this perspective, passion towards learning is related only with motivation towards the task since actors express their excitement towards learning from the process itself.

The second dimension of triggering passion towards collaboration and the task at hand via continuous learning is related with '*questioning*' how things can be done instead of explaining why things cannot be done. The learning process actually starts with questioning new ways of doing things in design process. This perspective helps create new things rather than convincing people not to do something new. Here is Olcay's explanation about this issue:

[30.34] I think so - I also think so in my own work - when a job comes, no matter how hard it is, if I think how can I do it, then you have actually done it. When you think about how I can't do that, we can already find many reasons. There are so many reasons that you already have convinced yourself that you can't do it anyway.

Çağatay is a production manager who once worked as a project manager and believes in the need for changing minds towards questioning the ways of doing things in his team. He believes that solving design problems is related with this viewpoint. He also mentions a link between working passionately and questioning things.

[29.84] Work with your heart both in the work you do and the rules set. Do not care who says what. Think about how it can be done. Because everyone tells you how it won't happen, no problem. You have to figure out how it can be. When you find this, the solution is already being produced. I've always worked like this.

Çağatay is also passionate about changing every individual's mind towards questioning how to tackle problems and create new ways of doing things, including the general manager of the company. As can be seen in the quote below, for creative problem solving it is vital to prevent oneself from explaining why things cannot be done, because this is a prevalent behavior that sets barriers preventing creative idea generation. Here is the explanation of Çağatay about how he deals with the problem he faced when trying to increase the production capacity by changing the questions to be asked:

[29.69] I know the 'can't' and my problem is 'how can it be done!' ... [29.69] I mean, don't tell me how it can't be, everybody tells me that, I have 70 people downstairs, and all 70 of them tell me how these 52 vehicles can't be done. [29.72] I said friends, don't tell me how it can't be done, you've already told this to everyone for years. We change the questions we are asking! Because tell me how you can! Do you need people, machines? Need supplies? Need an army? (...) [29.77] I already hear from everyone that it can't be. I mean, my general manager tells me the same thing, he says no. Why? We lose money. I already know all this. The problem is how it can be.

Since design is highly related with problem solving, it is important to formulate the right question. So questioning is not only limited to how things can be done. It has broader aspects that lead to continuous learning, which also triggers working passionately. It is important for every creative participant of collaborative design process to change their mind towards questioning themselves. Çağatay tries to provoke a change in his team members' mindset by making them learn how to ask the right question and creating an environment that they can question everything by themselves. This manner results in continuous learning arising from the curious minds of creative actors. He explains his strategy in detail as follows:

[29.15] Every Saturday the project team has meetings between 10 a.m. and 1 p.m. One hour of this is lunch, going out. Two hours is completely for a trend-oriented meeting. Now, since the team is very young... That day, for example, in the production standard, the step width and height are 400mm, and next step 300, and the next 200 something? Why? That's the question. I gather the friends, and say, friends, there is a question in the regulation. Why is it like that? (laughs) Come on. When you ask these questions to friends, they start asking themselves questions. The designer emerges from the engineer who asks himself a question. The designer does not emerge from the engineer who doesn't ask himself a question. In fact, every week, routinely, we're having a small call conference when they ask themselves these questions. When we routinely have this call conference, the team learns something with a bit of joke, a little fun, a little humor, and starts thinking about something. Then they say, here we have made the step width so and so, so we have made a mistake, so let's do it like that from now on. (...) [29.16] The person asks the question to himself the best. Because there's no curtain. I mean, when someone asks you a question, they are a little shy, thinks if you get angry, shameful, condescending, but when you are asking yourself, no problem. All I care about, what I'm trying to do to my friends in such little meetings is to make them ask

questions to themselves. This settles in a friend who recently joined the team in the last 3-4 months. Then, as soon as he enters the manufacturing process he is familiar with, his questions become more diverse.

This second dimension of continuous learning explained above, which sets forth the effect of '*questioning*,' is related with motivation towards the task like the first dimension. It is not related with motivation towards collaboration since it is related with transcending the mindset individually and focusing people on how something can be done, instead of explaining why things cannot be done.

One important condition to be considered about questioning to learn or to create something new is to make the participants feel comfortable about asking questions to everyone without the feeling of being humiliated or judged, which is the third dimension of continuous learning. Canan believes that the environment where everybody feels free to ask questions to each other supports the communication between actors as well.

[22.19] Everyone is supportive of each other in this regard. They can ask. They have managers. They can ask their managers. We do not do anything in particular, but we ask each other constantly due to our own way of working. Even me, all the time - I mean I have many years of experience - friends, do you think we should do it like this, like that? You know, I mean, we communicate by always talking together.

In addition to Canan's ideas, Çağatay also believes that respecting each other is an important factor that helps people ask questions freely with no doubt.

[29.20] In our one-to-one meetings with the team, every question and conflict is free. They can discuss with me, there is no problem - no trouble as long as it does not exceed the framework of mutual respect. No one tries to judge the other, no matter how stupid the idea is. I mean, that's all I'm trying to create. After creating that and we start talking, some things start coming out.

Questioning and learning help not only create novel solutions but also enhance individual performances and design processes. Canan benefits from asking questions with both of these two dimensions.

[22.15] I did a study with a friend: now, he can't make the processes keep up, I call him. I say, I'm listening now, why do you think? I don't talk much; I want him to tell me. I mean, there might be something we can't see either. Is his work interrupted or something happening, I mean why are your processes late? Think about it... I gave him a paper and said to write what he is doing during the day. 'Write it down yourself, take notes, and let's see'. He sees where he makes losses, because he wrote himself. He says, ah, how much have I got stuck there. Actually, it seems very efficient to him but up to that, he wrote even the tea breaks and toilet breaks. Then he said okay, there is such a problem. (...) [22.18] For example, we had a meeting previously, what can we improve in our design processes? We did this, I told you just now, are we doing it right? Now some projects have lapses, are we doing it right, maybe we are doing it wrong. Like, the mood board is at the beginning, I said "Are we going to present mood board at the end?" They immediately came up with suggestions, here we can do this, here we can do that, so collecting their suggestions also improves the process.

Creating an environment that people feel free to question is a triggering factor that is related with the intrinsic motivation of individuals towards collaboration, because in this case questioning is not meant to be questioning the self. It is about asking questions and seeking for answers from others or creating an environment open to discussion so that people can learn from each other.

The last dimension of the effect of continuous learning on the motivation of actors is related to being open to make mistakes. The creative learning process is very similar to the design thinking process which includes feedback from others and revision. Hence, it involves making mistakes and accepting the contribution of mistakes to the creation of novel design solutions. Design managers who believe in the power of letting teammates make mistakes benefit from this attitude a lot. Çağatay illustrates this by explaining how he motivates people to learn from their mistakes:

[29.52] There were new jobs that I didn't like. It is better that this young man experiences that this won't work. I say to him frankly, I say that this solution won't work. There are problems, try to solve these engineering problems. If you have a hesitation, if you want to solve it in the prototype, I will look at the cost. If it is not too high, do the prototype and let us solve it together in the field, we will solve it. And if we can't solve it, ok, let's throw it away. What did we learn? We learned that it won't work. This is a big gain for me. I mean, if you don't see this side of the work as gain, and criticize it as a loss, then you start to lose the person.

According to the participants, instead of getting stuck in a condition to stay away from making mistakes, it is better to keep moving by making mistakes. As Metin says, the managers' supportive manner about making mistakes makes people get rid of the fear of being criticized or unsuccessful, which leads them to be open to creation.

[14.14] Take this job and do it. But let's be together when it comes to the bottleneck. You can do whatever you want. Mistakes, you can make mistakes as much as you want, but don't stop. When a friend is hired, he does not work with the fear of making mistakes here. I think the biggest reason lies here. Because you can't do something if you're scared. No friend of mine lives with that fear here. Therefore, when we arrive, or when we share our experience as if we have done this like that, he can do that easily saying "aha, this is very nice". I mean, he won't perceive this as that, 'ah I couldn't do it and this happened'. He won't. Therefore, as days go by, our friend makes more beautiful, more original, more accurate designs.

Sometimes mistakes are the best teachers. One of the leaders who know and benefit from this fact is Çağatay. He states that he lets every employee make mistakes while designing a system even though he knows that it will not work. The quote below shows why he behaves like this:

[29.18] He says 'I have added a function to this truck, what do you say?' We look, and it doesn't sound plausible to me. No lies. This system will not work, but if I tell him so, it won't be nice. I say there is a singular project, let's apply this in that project. Let's apply it and if you need revisions on it, you can do all the revisions you want, you have the authority. Once my friend has done it, he learns that it can't fit there. He learns how to make something work even when it does not fit there. If there is anything he's stuck on, I already help by

coaching. Somehow, we deal with it, because I have solved problems all my life, something always comes to your mind at that moment.

Managers also make mistakes and learn from them as the below quote by Olcay demonstrates. It is important to create an environment that removes the fear of making mistakes to make people learn how to cope with existing problems and be creative. The critical point is to '*learn*' from mistakes, not to avoid making mistakes.

[30.40] We have made about 20-25 very big mistakes in doing this job. I'm talking about mistakes we won't make again. I mean, we'll make other mistakes, but at least we won't these mistakes. Because you can't progress by making right decisions each time in such a short time.

The supportive manner of a manager towards letting the workers make mistakes and discover what was wrong, followed by learning from the mistake is critical for self-improvement and gaining self-confidence. Olcay explained the whole story of how an employee who learned to cope with new problems with the support of him as his manager is open to take risks.

[30.21] I have held a friend – who I have high hopes for – responsible for 3 blue collar workers on the CNC machines. And during a very tight scheduled project, I wanted him to lead that team. One of his responsibilities was to guarantee that the machines are operational 24-7, making maintenances in that respect, etc. My blue-collar friends have 20-25 years of experience and when the machine breaks down, they take the action to make that machine run normally within two hours. But I affiliated that team to that white-collar friend to make the organization more defined and I said to manage it. The machine broke down and normally my blue-collar workers would take action. I said stop, don't. He has to do it. But that was a very amazing thing, a process, in a tight process they wanted to discuss, then I started to pressure him, trying to figure out what he was doing. I saw that he was trying to learn from me about what he had to do and didn't do anything, I tried to make him sweat by constantly asking questions, taking into consideration that the machine was staying out of order. I managed to make him work until he took the right action. When the whole process was completed, and the machine became operational again, I took him to one-to-one, told him what his mistakes were and tried to figure out if he understood how to take action. After that, he improved himself incredibly regarding the machines.

Making mistakes – which is the fourth and last dimension of continuous learning – has an effect on the motivation of individuals towards both the task and collaboration process. Making mistakes is a part of learning process. In terms of motivation towards the task, *learning* from mistakes can help people make inferences from their mistakes and keep stepping forward in the process individually. In terms of motivation towards collaboration, learning from mistakes can be possible with the other members' contribution or the supportive manner of the team leaders as quoted from the interviews. In this case, it turns out to be a factor that forges a link among the team members and motivates people towards collaboration.

To sum up, my findings show that the creative design process is closely linked to the creative learning process, and learning is a significant motivator in these processes such that when learning stops, it can result in a change in jobs or sectors. Bekir is a designer who indicates that he quit his job when he felt that he did not learn something new at a point in his career.

[34.19] When learning stops, I feel that my creativity is dying. I wanted to get out of the comfort zone, that's why I left. I mean, because that comfort would have made me a clerk. (...) [34.20] When it becomes monotonous, when what you know starts to come back to you, there's something like, um, for example, a nice meal of steak, you start eating steak every day. After a while you start to find it repulsive. I mean, you need to break that routine a little bit. ... Sometimes you need to get away.

Drawing on Bekir's explanation, it seems like making actors learn something new during design processes can be a solution to the demotivating effect of routine tasks which I explained in the previous section. Like Bekir, Berrak explained that she quit her job after 7 years of experience since it turned out to be routine and she expected to learn something new. She also explained the reason behind her motivation to work in her current job in relation with the supportive manner of the company towards learning.

[32.33] Now, I'm learning, and I have, for example, asked for a training from the company to invest in me. If I can get returns in this sense, it is something that will strengthen this (employee-company) exchange because... I am being fed from the place I am at. Yes, I say that I make serious effort, I earn as much as I can, I certainly don't think I am earning much. I mean, by earning much, not much more than I think it's supposed to be, even less than I think. But besides, it's also like a school for me. I was seriously stuck, I had to take a step over a 7-year old habit, and the company I started to work for was kind of going ahead a few steps forwards. Because I really came across a field like school. What I mean by school is, as I said, R&D, mass production, and retail, end user, tracking all the channels of that product within the location of that store, I mean.

When learning stops because the tasks turn out to be routine, it demotivates people. As Ayberk says, pleasure is highly interrelated with learning.

[33.7] I enjoyed learning things. I've seen production there. I mean, I was working more enthusiastically at first because I was learning something. Then, it began to turn into a routine.

In conclusion, both managers and employees in different positions express that continuous learning is a crucial factor that motivates them towards the task at hand and supports collaborative working. Continuous learning is also important because it decreases the demotivating effect of routine tasks on creative individuals. For learning to occur, it is vital to question and learn asking the right questions. The main question which is pertinent in every design process is *'how can I do it'* and this is not so prevalent among people participating collaborative design processes. In order to change the mindset from explaining why things cannot be done to how things can be done, it is important to create an environment where people are not being judged, humiliated, or embarrassed because of their ideas. This attitude is also in line with feeling the need for collaboration. If a barrier that prevents design collaborations is the lack of an environment that people can communicate and question freely, another barrier can be the lack of belief towards the contribution of collaborative working to design a creative product. Hence, in the following section I will set forth the effect of

'believing' in the need for collaboration as an important factor that motivates actors towards collaboration.

4.2.5. Believing in the need for collaboration

As highlighted in the existing studies, one of the main reasons behind conducting collaborative design processes is the complexity of today's problems that designers face today (see Section 2.2). The notion of *'genius designer'* is no longer pertinent. The mental capacity of any individual does not comply with the complex design problems today. This is a theoretical fact that design researchers agree on. However, it is very important that the actors of collaborative design process agree upon this fact. My findings confirm that as long as the actors believe that collaborating with others from either the same profession or another is necessary, they are prone to contribute more and work eagerly. In addition to the necessity of working together because of the complexity of problems, actors also express that collaboration is vital since they are more likely to be creative working collectively and they find it entertaining to work together.

When people are motivated to work collaboratively, it is easier to overcome the obstacles they face during the process. Indeed, many interviewees express that design collaborations are conducted effectively when every actor not only believes in the task, but also in the need for collaboration. They state *'believing in the need for collaboration'* as a first step towards successful collaboration, as quoted from Çağatay below:

[29.101] When the boss asked me how to produce 52 vehicles earlier this month, I said, I'll go down and talk to my team. When my team said we will produce this vehicle, I consider it already produced and get on with my work. That's it. I mean when they believe in this, the rest is not really important. My problem is this. It's all about belief, all about respect, I mean if we consider our differences as wealth, it is very easy.

Oktay, an industrial designer experienced in 3D visualization, was one of the experts who believed in the need for collaboration and explained the situation as follows:

[31.25] There is no way you can solve any problem alone. Those problems are so big that, because you know you can't solve it alone, you are being adapted by knowing that you will change. And you come to the conclusion that way.

Additionally, the diversity of people working on the same project increases the diversity of ideas generated. As Ayberk explained, the diversity of ideas generated is closely linked to the number of collaborators.

[33.11] In design, I think, the diversity of ideas affects the quality of the products, innovation, and know-how in research, the development of ideas... The more we (collaborators) add to the product, the more it feels like adding information and innovation.

Damla is a design manager whom like Ayberk, also believes in the productivity of working together with people from different disciplines. She believes that working together results in generating diverse ideas that an individual cannot achieve alone. Moreover, she supports collaborating with others because she finds it entertaining. Since pleasure is an important factor to keep doing the same thing, finding collaboration entertaining seems to be another factor that affects the success of design collaborations.

[24.43] The ideas you produce when you are alone are always a bit lower than the teams. I mean, I believe this. Because, you know, people from different disciplines are able to come up with different ideas and design a better product where they are all combined. I believe this. I have more fun like that, anyway. That's why I prefer this.

In the literature it is suggested that as a result of having different pre-existing patterns of work activities and specialized work languages between various people, it is probable that there will be communication problems that result in process iterations (Sonnenwald, 1996). However, according to the interview data, when participants

believe that different knowledge bases and ways of thinking cultivate creativity, participants seem eager to work together to overcome the problems arising because of these factors. Çağatay, for example, said:

[29.93] As long as you consider looking at how to improve the process together, there are no problems. Because the best part of our educational differences is that he knows many things that I don't. Do you understand what I mean? For example, he knows color harmony better than I do. There is accumulated knowledge, why should I not use it as an advantage. Why not take it?

When all the actors believe in the contribution of every person in the team and spend time on discussing the ideas generated throughout the process by any of the actors, it is probable to come up with creative solutions. Active contribution of every actor during the evaluation of ideas generated without prejudice has a potential to create team spirit based on respecting and valuing each other. Nesrin was one of the product development managers working in the ceramics sector who believes in the contribution of every actor to the collaborative process even though she finds some ideas nonsense at first sight.

[21.24] We, of course, are trying to look at each other as professionals, but inevitably our ideas are shaped as individuals and also as end users. The more there are people to give ideas, the more likely we are to reach more real ideas. Therefore, when you come together, you get different ideas from different people. Each of them is put on the table. Sometimes some are found pretty ridiculous, sometimes very extreme, but actually considered, why not. Therefore, I think people from different fields with different perspectives add different meanings.

However, Klein et al. (2006) suggest that it is hard to agree on a design decision that satisfies all actors contributing to the process who have different object worlds because of the strong interdependencies between design decisions. This is why the design process and the end product are being affected negatively with the increasing number of collaborators. Another reason that makes it difficult to agree on design

decisions is strict time limitations, as Nesrin explains. Although she believes that it is necessary to collaborate, it is also hard to overcome the conflicts under strict time limitations when there are many ideas around.

[21.25] G: So, do you think that having this many alternatives is problematic or efficient in the design process? N: (...) Since we are always in a hurry when we are experiencing them at that moment, we say that, uh, that is too much. But in fact, it is not. I mean, when the final product is made, we notice that all of them add value. I can say that.

To further understand the role of believing in the need for collaboration and the contribution of every actor to the process, it can be helpful to imagine the opposite situation. I heard many stories during the interviews on the situation where an actor was not willing to contribute to the process but was obligated to. In this case, she does not produce something that satisfies the expectations and the process may get stuck at a point and result in many unintended iterations. Oktay indicates that the willingness and effort of every participant during the collaborative design process is valuable for the sake of the whole process.

[31.14] In the product we developed, the effort and labor of many people in different subjects are in question. I mean, if a person from there makes it deficient or does it wrong or I don't know in any other way, makes a mistake, in the end that design somehow goes and is returned. When everyone works with motivation, that work gets a healthy result.

On the contrary, if any actor does not want to be a part of that collaboration, if she does not believe in the need for collaboration, it is impossible to benefit from her. Olcay explains this as follows:

[30.20] For once, what I believe that it is not possible unless the other party provides something. The first is this one. (...) I mean, I'm talking about the people who don't want to give and are aware that they don't want to give. You can't take anything from these people. If this person is hired, I think she should be gotten rid of.

To sum up, it is not enough to *'know'* that design collaboration is necessary to come up with creative design solutions for complex design problems. It is also vital that every participant *'believes'* in the need for collaboration. By this means, actors may be willing to be a part of a team and do their best to contribute to the process by knowing that the contribution of different experts supports the generation and development of required design solutions. This attitude can also be evaluated as a supporting factor for creating a team spirit, which will be examined in Section 4.2 in detail.

An interesting point about believing in the need for collaboration is that most of the comments on this issue belong to managers, instead of the collaborators in their teams. Actually, the expected situation is the belief of actors towards the necessity of collaboration. Deriving from this situation, it seems like the interviewees tend to focus on their individual performance instead of team performance in collaborative design processes. This may be related with not internalizing the collaborative manner as a way of working. As a result, it is expected to face conflict between teammates, instead of creating shared understanding and effective communication. However, there are many other factors affecting the attitude of actors towards collaboration, most of which are related with their emotional reactions when they face different attitudes and situations. In the following section, both the team leaders' and the team members' attitudes that enable creating a team spirit will be analyzed in depth.

4.2.6. Discussion

In this section I have presented participants' personal factors that affect their intrinsic motivation towards the task at hand and collaboration, which are: (1) being passionate about the work; (2) reaching goals by continuous progress; (3) believing in the task; (4) continuous learning; and (5) believing in the need for collaboration.

When people are passionate about doing a task, they go beyond their limits in order to achieve what they want and overcome the obstacles they face during collaborative design processes. Since they are highly intrinsically motivated towards handling the task, they are expected to put in a higher intensity of cognitive effort and learn new skills in the target domain or even from other domains (Amabile 1997; Camerer & Hogarth, 1999). Being passionate about the task is mainly related with task motivation in creative tasks or innovative projects. In case the task is routine, which involves less amount of creativity, it is hard to talk about passion towards the task for creative individuals. From the five interviewees who expressed their passion towards the task, four of them are managers. Only one interviewee, who was an engineer, expressed his love and passion towards the work he is doing. As I will explain in the following section, to spread the excitement of managers to the team members is a critical issue that managers try to find ways to achieve. Additionally, two out of five interviewees are engineers; while the rest is designers. So, discipline should not be evaluated as a factor that shapes passion towards work. Experts from different disciplines can feel passionate about the tasks that they are working on.

Secondly, when people reach a defined goal, it makes them feel joyous and keeps them moving on the same path of the creative design spiral which follows the sequence of 'pleasure-passion-purpose-product-pleasure-...'. Additionally, reaching a goal makes people feel self-confident and fulfils the need for self-actualization to a degree. The goal in creative design collaborations can be as far as seeing the product on the market or at an international fair. However, in long-term projects, it cannot be a motivating factor to wait for years to see the product on the market. In this case, setting sub-goals in order to be able to reach them and feel motivated to keep moving on is crucial. Furthermore, setting sub-goals should be followed by monitoring the progress and giving feedback to the actors on their progress. From the interviewees who stressed the positive effect of reaching goals on their motivation, half of them were managers. Additionally, six out of ten interviewees were designers who expressed that setting sub-goals and keep stepping forwards continuously motivates them to progress; whilst

the rest was engineers. Reaching goals is also related with motivation towards collaboration, since reaching the utmost goal – the product to be designed – is only possible with active collaboration of experts from diverse fields.

Thirdly, when people believe that there is a solution to the existing problem and they believe their potential to discover it, they achieve it. 12 interviewees stressed that believing in a task or owning a project is a triggering factor that results in an efficient conduct of the process. However, only three of them were employees; whereas the rest were managers. The interviewees refer to belief towards the task as a more effective factor than the systematic design methods in terms of conducting an effective process. Eight out of 12 interviewees were designers who think that believing in the task is a motivating factor in design collaborations. Three of the rest were engineers and there was one expert from ceramics discipline who expressed that he feels motivated as a result of his belief towards the task. For creative individuals to believe in a task, the task should involve novelty, require creative thinking skills, and be somehow challenging. Otherwise, routine tasks which involve high level of mechanical skills and demand lower levels of creativity harness the actors' owning and attachment towards the task, and cause a loss of motivation. The reason why actors feel demotivated to work on routine tasks is that they do not involve learning, which is the fourth personal factor that affects intrinsic motivation of individuals towards the task and collaboration.

Since learning can occur from the process and from the other actors contributing to the process, it is related with both motivation towards the task and collaboration. Both managers and employees seem to be congruent on the positive effect of continuous learning on motivation, since the number of employees and managers were in half shares who stressed this issue. Continuous learning is valuable for both engineers and designers that three engineers and nine designers expressed that learning something new increases their motivation towards both the task and collaboration. There are four dimensions of continuous learning that emerged as themes in my research. The first

one is that *passion* towards learning turns out to be passion towards the task at hand in design collaborations, since the product design process is such a process that actors continuously search for new ways of doing things. Secondly, in order to learn continuously, it is vital to ask the right questions. It is critical to create an attitude seeking for '*how things can be done*' instead of '*why things cannot be done*'. This is an important issue that the managers stressed a lot, because this manner results in developing creative ideas arising from the curious minds of creative individuals. The third dimension of continuous learning is to create an environment where people can ask questions without the worry of being humiliated or judged. Under these circumstances, an increase in the motivation towards collaboration is expected as a result of the supportive environment where people ask questions with no hesitation and learn from each other. The last dimension of continuous learning is to consider mistakes as teachers and learn from them. This has a twofold effect on the motivation of individuals in collaborative design processes. The first is that people can learn from their mistakes and keep developing new skills and knowledge learning from their mistakes. In this case, it may trigger motivation towards the task. Additionally, actors in a team may learn from their mistakes with the support of other actors in the team, which may trigger motivation towards collaboration.

Lastly, in order to make people feel highly intrinsically motivated in collaborative design processes, it is important to make them believe in the need for collaboration. Although there is a broad consensus among design researchers on the need for collaboration in design, it is vital for the design practitioners to be convinced about it in order to motivate them to collaborate. The interviewees who believe in the need for collaboration in design state that this is because (1) collaboration in design increases the diversity of ideas generated; (2) it is entertaining to work with colleagues; (3) it is valuable to have different knowledgebases, and lastly (4) it supports creating a team spirit. However, it is interesting that only two out of six interviewees were employees who stressed the need for collaboration. It may be seen as a clue that shows the lack of belief towards collaboration among the employees as a result of their current work

approaches which is still focused on individual work. Moreover, only one of the interviewees was engineer who expressed his belief towards collaboration, whilst the rest was designers. In view of the fact that the number of engineers contributed to this research was five out of 25, whereas 11 of them were designers, it is still remarkable that there is a distinction between the attitude of designers and engineers towards the need for collaboration in design.

4.3. Creating a Team Spirit

In design collaborations, a widely encountered problem is a lack of communication and shared understanding between actors (Resoulifaret al., 2014; Kleinsmann et al., 2007). A reason behind this situation can be the lack of a team spirit. According to my findings, creating a team '*spirit*' is not possible only by '*knowing*' that it is important for the success of the team. The main point is to '*accept*' that acting as a team is valuable for both the success of the team and '*satisfying*' and '*supporting*' all the members.

In light of my interview data, the correlation between intrinsic motivation and team spirit is that intrinsically motivated people tend to act as a team since it is compulsory to reach their goals. In the opposite way when people are not intrinsically motivated, they tend to act individually which may cause conflict and misunderstanding between team members.

By team spirit I mean feeling attached to the team and being satisfied to work for some reasons in that company with those managers and those members on that project. In this section, I will set forth the reasons why people value a team spirit in the beginning. After that I will examine the factors and situations which create a team spirit on four levels; namely (1) actor level; (2) departmental level, (3) managerial level; (4) company level. In every level, I will evaluate the issue from the team members' perspective first, followed by the team leaders' perspective.

If we consider the collaborative design process as a technical process, then a well-developed systematic design method can be expected to work well and result in an efficient process and successful product. However, this is not the case in practice. Research on how different actors experience their roles on collaborative design processes shows that the actual design process is different from the documented process, because actors do not always follow the standard design processes (Kim & Lee, 2016). Additionally, designers tend to develop their own approaches in accordance with product development context (Maffin, 1998). Moreover, the collaborative design process has cognitive, social, and motivational dimensions, as well as the technical one. As a result, the team spirit turns out to be a critical issue to consider in this research by its effect on intrinsic motivation towards working on a task with many other actors and leaders in a specific company.

Being a design manager, Haldun values the team spirit and explains that he cares about making his team members feel attached to the team since they are not working mechanically as machines, but are affected by emotional changes as follows:

[7.9] In the end we are human, we are not machines. There is sentimentality in this work, this emotional communication is important among people. (...) we hold onto this emotional communication (...). I care about an infrastructure that makes me feel being a part of such a team.

According to my findings, feeling attached to the team and focusing on the efficient conduct of the task are vital since it makes every actor in the team feel excited to work on that project. Another reason why Haldun values a team spirit is its effect on spreading excitement. He said:

[7.15] The biggest thing is that you want everyone (participating in the process) to experience the excitement, but it doesn't happen. That's the biggest problem.

Drawing on Haldun's inference, it can be said that having a passionate manager is not enough for the efficient conduct of the process. It is important to spread the passion to

the other actors and motivate them towards the task and collaboration, which can be possible by creating a team spirit. Adding on the standard systematic design processes, it is crucial to understand the significance of creating a team spirit in design collaborations. Based on his 25 years of experience, Çağatay distinguishes between technical management and psychological management. He says:

[29.100] The technique of the work is already solved by competent people like us. What really matters is psychological management. It's very simple when you can do it.

Like Çağatay, Erman, who is a production manager in the ceramics industry, explained the effect of psychological management on the efficient conduct of a well-designed systematic method as follows:

[3.13] I mean, the steps to be taken are clear, but I believe that in any case, no matter how much your roadmap is clear, it is very relevant to the speed, performance, efficiency, relationship management that you will get in stages. I mean, we've been experiencing this for years. So you can fix things as much as you want, do them as systematically as you want, but if you have to spend x time and resources as you go from Stage 1 to Stage 2, if you have good relationship management, if you can train people in this direction, if you can do operational, organizational setup as well, if you can manage this work, the resource you spend returns back to you as plus, profitability in the form of x-1, x-1. I think it is very important, based on my experience.

Selma, another production manager working in the ceramics industry, asserts that every project in which all the actors feels a high amount of excitement to contribute and be a part of that project and team becomes successful in the end. Here is her explanation about the effect of a team spirit on the efficient conduct of a systematic design process during design collaborations:

[5.6] The negative is like this; in fact, this is our general thing, the disruption while going from a process to a process: for example, the product is produced, it will be exhibited, we experience some hitches there. I mean, these processes should be triggering one after another and everyone should be focused on

completing the project with the same responsibility, without skipping a day. Because product and design management live with products, obviously, I act much more sensitive here, but I tell you with sincerity, other departments, too, other units, too must act as sensitive as us. ...everyone should be in real harmony and go and finally our friend at the point of sale should have the same excitement. This is already difficult, all the projects where you create this are achieving success. As this decrease, the likelihood of success of the project decreases. ...Then one thing that is very important for us can be a third job for the other. [5.6] See, but it is important to reflect that spirit, I think, you know if that spirit is reflected, it continues, if not, it is stuck in the link that is not reflected on.

It is important to consider that team spirit is not only related with motivation towards collaboration. The point here is that the team spirit is related with task motivation as well. My findings show that actors may feel attached to the team, however, if they are not attached to the task they are obliged to create, the product will not be as successful as expected. Banu, working in the same company with Selma as brand communication manager, expressed the same problem of the lack of team spirit. She says:

[4.10] You know, someone approves something and then the other doesn't, the deadlines are delayed, everyone sets their own priority at a certain point. The priority of their work continues rather than that job. So, I think we're going to learn that, with a good, better orchestra conductor, maybe - because there are changes in new structures - I'm a little more hopeful for the future. I think we're in the beginning, you know, we're taking good steps, but we can do better, I mean I think so.

Her solution to the existing problem was related with the manager. Although she did not explain how a manager can affect the motivation of individuals towards the task, I collected data on this case from many other interviewees. In section 4.2.3 I will explain the effect of team leaders and managers on creating a team spirit in detail.

In case actors do not act as a team, they behave as if there is a game to win. Moreover, intense competition between actors has a dampening effect on employees' optimal effort in relation with the number of contestants (Hellmann & Thiele, 2011). Under these circumstances, they fight for '*their*' choices, instead of the '*right*' for the project.

This situation results in a communication where the 'I language' dominates and a setback in the process occurs, according to my analysis. Experiencing such situations, Oktay explains this as follows:

[31.24] Anything that can be done in a week, can take 2-3 weeks because of that indecision. You know (someone says) it will be like I said, the other (says) it will be what I said. In the decisions between these options, a decision is always made but takes a while. Because if the decision cannot be taken, it is moved to a higher authority. The person at the higher authority takes that decision and you actually give information, good or bad, and he makes a decision. Everyone becomes obliged to respect that decision.

Actually, a team spirit cannot be evaluated as a factor that prevents conflict. Conflict is inevitable in the environments where many creative individuals develop diverse creative solutions to existing problems. However, a team spirit helps making design decisions in this fertile environment of ideas by providing an atmosphere where design decisions are made for the sake of the project, not for the sake of the actors' ego. The lack of team spirit results in fighting for the power and ego of individual actors.

In the following section, I will explain the effect of team spirit on both task and collaboration motivation of actors at the actor level. By actor level, I mean the effect of the attitudes of individuals on their teammates.

4.3.1. Actor level

In this section I will explain what motivates employees towards collaboration in relation with the attitudes of their teammates. The interview data that serve this section of my analysis is derived mostly from the experiences of the employees. Additionally, I benefit from the experiences of a few managers about the attitudes of teammates on creating team spirit which triggers intrinsic motivation towards collaboration. I prefer to evaluate them in this section, instead of Section 4.2.3 where I explained creating

team spirit in managerial level, since they were talking about the members in their team as their teammates, instead of people they manage.

While talking about what creates a team spirit in design collaborations, actors highlighted the effect of personal relations. Here is what Oktay says about creating team spirit in actor level:

[31.11] The colleagues' motivation towards each other, that is, if everyone does something for someone else, it ultimately becomes something that will keep the team spirit alive.

Like Oktay, Berrak values supporting each other even out of work as a factor that increases her motivation towards collaboration.

[32.27] People are important. The team is also very important. Team motivation is also very important. There, when someone sees me down, says let's go and have a cup of coffee, I can suddenly ensure my daily motivation.

Tuna is working in an environment he defines as a milieu of friends. He believes that this environment not only motivates him towards collaboration, but also makes him stand the negative aspects of his work.

[35.3] I think I consider it as an extension of university because our colleagues are always young. They are people I've already met outside, played sports or any other activity together. So, this is a factor that increases motivation. We can mess around when it's appropriate and we can also chat, etc. It is good in that respect, there is no rivalry, (it is a) friendly environment, I think this is something that increases motivation or something that makes it bearable (laughs).

Friendship supports collaboration since it creates an environment where people can communicate without barriers and open communication supports shared understanding between team members. Moreover, it is important to consider that the actors approach friendship as a factor that prevents rivalry. Like friendship, working

together for long years also supports the creation of a team spirit and shared understanding. Damla explains:

[24.15] the teams here are (composed of) people who have worked with each other for a really long time. People who have been involved in such processes for at least 5 years, 10 years. So the managers are seriously creating teams composed of those people, because they have already analyzed each other, working in harmony. You know, teams are more harmonious that way. (...)
[24.38] Big fights don't usually happen here, there are differences of opinion and then an optimum solution can be found. That is indeed the positive effect of working together for many years.

Actually, having similar mindsets may not support creativity in collaborative design teams, because it may result in too much cohesion and suboptimal design solutions as a result of groupthink (Badke-Schaub et al., 2007; Janis, 1982). Although Damla believes that forming a team composed of people working in harmony is a factor that creates a team spirit, Canan intentionally prefers not to create a team from people who get on well with each other in some cases as explained below.

[22.11] Sometimes we bring together the incompatible actors (laughs) so they learn to get along. Everyone in the team (our team) everyone has a different opinion. We don't actually do much for them to be compatible with each other. There is no such thing. Since we don't have a very overcrowded team anyway, generally like that, like these should work in harmony. Being quirky is important sometimes because not everyone is of the same mind. So we go to project evaluations, teams arrive, let's think different when someone says something quirky. Because when you are of the same mind, the project is progressing with the same mind. In our customers, there is everyone.

She believes that diversity of mindsets and attitudes enriches and supports a creative environment. From these attitudes, I can say that a team spirit can be created in teams composed of actors who are compatible with each other. Moreover, it is vital to respect, communicate, and discuss without fighting for ego or power in teams composed of actors from diverse expertise and having different mindsets. In line with

this statement, Burçin explains that attitudes and communication style are more important than how well equipped her teammates are. She says:

[23.3] I think motivation is directly related to the way your teammate works and the performance of the person you work with. I'm not talking about one's skills, creativity. I'm just talking in terms of process. I mean, the way of communication with you, the way of talking, the way of writing, the time it takes to reply to the questions you ask, that is, not only the style, but also the time, and of course the consistency or accuracy of the replies, surely affects the progress of the project.

Like Burçin, Çağatay defends that the team spirit is related with bilateral relations which is purged from ego, symbols, and offending behaviors.

[29.66] What really matters is not to end personal relations between our team members (...) That's it, more is not required. Know what I mean? So there's no need for anything to happen. Simple as that, more would make it confusing. What really matters is how we give support. How does everyone support each other? Then something emerges (...) [29.96] when you leave your ego aside, leave the icons aside, leave the thorns aside and sit down and enjoy the meeting and work. When you talk in environments that will not offend anyone, the work is done.

As design collaboration has social aspects in addition to technical ones, team relations are not limited to professional relations only for the continuity of the job. Because of this reason, friendship becomes a factor to be evaluated for creating a team spirit. However, personal relations are not always sufficient and beneficial for a team spirit. Nesrin believes that personal relationships are beneficial for teams with some prerequisites, as follows:

[21.3] When good relationships and people who understand each other well coincide, problems are certainly solved faster. At least, unless you see the matter only as a job and personalize it, if the other side is same, it moves faster. Thus, I think people are also important here. [21.4] For example, expectations come back in a positive way, thinking that there is no intentional coercion made to him. But there are times that things change from person to person or according to the emotional state of people. And the pressure of these forces

within this time limit sometimes can be perceived as personal. Then things are stuck more at a dead end. These things happen a lot, because we always work against time and everyone has other things to do, sometimes these are perceived as such. Unless it is not perceived as such, everything goes much clearer.

Like Nesrin, Ayberk believes that personal relations support the effective conduct of the collaborative design process between designers and engineers. Knowing and trusting each other helps developing healthy communication between the actors. He says:

[33.1] If you are talking with that engineer and you have good relationship, the project could go very well. But if he was someone you didn't know and he didn't trust you, frankly something was, um, communication is more disconnected then.

The interview data shows that personal relations support team relations and motivate actors towards collaboration by forging a link between actors. Meanwhile, drawing on the interviewees' experiences on the effect of personal relations on creating a team spirit, it is vital to create a balance between friendship and professional attitude for healthy communication. Personalizing things may result in misunderstandings that may prevent communication and a loss of motivation, whereas too much of a professional attitude may set barriers among team members and again prevent open communication and shared understanding between them.

4.3.2. Departmental level

Creating a team spirit at the departmental level seems like the hardest of all since nearly all the interviewees mention the difficulties they face because of the conflict between departments. In the literature, there is a common view that different locations, backgrounds, contextual information, and languages are factors that affect creating a qualified team having shared understanding (Rasoulifar et al., 2014; Anderl et al., 2009; Eckert et al., 2001). Accordingly, a lack of shared understanding can cause

unnecessary iterations in the process and decrease the quality of the final product (Kleinsmann & Valkenburg, 2008).

As a result of working in different departments, actors from different disciplines have different responsibilities and priorities. Although this is necessary and useful for design collaborations, it sometimes results in conflict and problems during the process. In this section I will set forth the effect of departmental differentiation on creating a team spirit during design collaborations.

The only interviewee who indicated that the departments working collaboratively in his company communicated well was Haldun. He says that this is what makes his team powerful and the employees feel empathy towards their teammates.

[7.16] The design is part of the team. We're not disconnected. So I've had a lot of research, on other teams, how do they do it? For example, the problem I come across the most, the one you said, communication is very disconnected. Somebody wants something, but the thing made is different than that. Either he cannot tell what he wants clearly, or the output is a bad mechanical design output, but he gets away by saying the expectation like that, etc. This thing (communication) is lacking. But as long as we have this link – that is robust – I think this is one of the things that make us both fast and successful. When the mechanical designer here spends time with this culture, he can now analyze the job as an industrial designer. When the industrial designer is also under the same roof, he can look at it as a mechanical designer. I mean, they try to make better outputs by empathizing with each other.

Working in the same company with Haldun, Metin explained his belief towards active contribution and excitement of every department as follows:

[14.16] We strive to keep each unit active, vivid, including purchasing, including planning. (...) Because we live on these. If we can't live on, we'll rot.

Meanwhile, Metin believes that the collaborative design team is not only composed of the actors working in the departments of the company. Likewise, he evaluates

suppliers from different companies they are working with as part of his team, since they contribute to the end product like every other actor.

[14.23] It is not enough to keep a product alive here within this company, but if you include your supplier in the excitement, really good things happen there. Think about it, the motivation of their own team and the motivation of this company will meet each other. (...) [14.24] This is both the most beautiful and the hardest part, but thank goodness those are being handled in a friendly-manner. I mean, you see a glitter in their eyes when you talk about the goals here, the jobs done here, and that glitter reflects on the work. These are awesome things.

In this case, it seems like this company achieved to create a team spirit even among the suppliers and spread their excitement to third parties by the expectations of the jobs done. This can also be seen as motivating even third parties by pointing at the final goal, the intended product design. So, at the departmental level it is also worth considering the motivation of suppliers towards collaboration or the task at hand, which results in excitement and their active contribution to the collaborative design process. On the contrary, the situation even between departments is the opposite in most cases. Departments tend to act as individual actors fighting to win a battle with other departments. The conflict between departments harm collaborative design process in many ways, as Bekir explains:

[34.2] There is something inside such as: Let 'us' (emphasizes) bring the project to a good point, no 'we' (emphasizes) bring it to a good point. Such conflict can occur between these departments. Of course, this kind of conflict leads to what I say: the meetings to be inefficient, and then to the delay of the project through not being shared, not making decisions...such communications disrupt the projects inside.

There is vast amount of research on designer-engineer collaborations, examining the problems arising during their collaborations. Designers and engineers tend to treat each other as 'the others' and evaluate the same task from different dimensions. As a result of different mindsets and work approaches, conflict is inevitable between

designers and engineers. As an engineer, Çağatay explains different attitudes of designers and engineers as follows:

[29.90] Engineers are accustomed to living within limited conditions. As for ID people, they care about how to live outside the limits. One of them is used to live outside the forest, the other is used to not leave the forest. Now you say let's make these together to make the trees sparse, make everywhere a forest, let it be sparse so that everyone can live. Man, it is too hard. Very hard. I mean, this time the friends in the forest say no, don't let them in. These are problematic, these are taking it to an unknown place. Brother, is such a curve possible? How do I turn our sheet metal part to there, it does not turn brother, not possible. How did you draw it, go change it.

Although diversity of mindsets is being promoted for the sake of creativity in design teams, it also results in clash of views in multidisciplinary teams that the managers try to administrate (Badke-Schaub, et al., 2010). In line with Çağatay, Olcay as a designer makes a clear distinction between the attitudes of designers and engineers.

[30.49] In general, the approach of the engineering wing to work is as follows. Let's go to the simplest one. Let's do the easiest way possible. I mean, this is not a criticism, maybe it is required at some point because we are constantly innovating, making innovation or something, that is a team mass producing, assembling, that accommodates engineering and R&D, it doesn't mean that the thing I did is to look like made by Elon Musk or something.

Olcay also states that the main contradiction between designers and engineers is caused by the justification of design decisions. Engineers can set forth the reasons behind their choices depending on rational facts. On the contrary, decisions of design departments cannot be evaluated based on rational facts in most cases. Olcay says:

[30.50] engineering has something in itself to go for the easiest way. This makes it a little simpler for them, when we go into that coordination, or rather, when we go into that equation, to job gets a little broken. Because we are, as a department, how do I say, we are doing more of an interpretation-based work, because something I say to be is more interpretation based but the thing done by the engineering is something more verifiable mathematically. (...) [30.51] The person responsible for aerodynamics says that if we do this like that, I gain

2 counts. He asks the other party if you are losing something, if the other party does not complain, they settle and agree among themselves. If they are losing, then they're trying to find a middle ground. When we enter this equation, the work changes a bit. Because we say something based on interpretation. We say that you gain 1 count, but we say, for example this does not sell, or we say that is not good. Not good is not some kind of expression, I mean not good for here but how many units of not good? Not, I mean not good, like works as yes, no, 1, 0 there, they have stuff like things like closer to the stuff I say, but that is connected to that etc. stuff like that. For this reason, there is a conflict in situations where design takes place because it is not measurable and we have more difficult persuasion procedures, more difficult weapons.

Because of their different object words and training, engineering designers and industrial designers have difficulties in communication. Engineering designers tend to employ systematic problem-solving strategies and to justify solutions with facts, whereas product designers are trained to solve problems intuitively, rarely relying on quantitative data (Pei et al., 2010). For this reason, the contradiction between designers and engineers can be evaluated as the contradiction between the artistic and mechanic attitudes. So, it can produce many other contradictions between different mindsets of artists and technicians. Supporting this notion, Burçin explains the different attitudes of actors in the design and production departments as follows:

[23.9] At the factory where I work currently, the simplest products are their favorite designs in terms of production. You know, I could say something like that. As we move to the upper segment, more and more time-consuming products emerge. I say this in terms of production, I mean, from the point of view of the manufacturing department (...) they work in units per day, certain units, certain minutes and everything is certain. As these products get more difficult, they don't look at a product as a design, a sale, I mean not like that. In the end, a material comes and they turn it into a product. There is a time period, 10 workers will make this much product in that time. People think in such mathematical process like this. Therefore, you know, it does not concern them if a product is beautiful, ugly, its color is red, the edge is 5 radius, etc. So, no matter how upper segment the product is, I mean, as the products that require painting, hand crafting arrive, they become unhappy and don't want to do it. The fact that they don't want to do that pressures us as a department. Because he thinks of it as a chore. It reduces motivation, and also reduces our motivation. What we say we can do, turns out to be I can't. I mean, if the production says I can't do it, it means that the product doesn't come out. So,

our fights begin again. Like, of course you can do it, no I cannot do it, there is not enough time, enough manpower, etc., we enter into these dialogues with production.

If one reason behind the differences in the attitudes of departments and actors from different disciplines is their mindsets and work approaches, another may be their preferences. Dunbar (1995) states that actors' motives towards engaging in a task and the pleasure they gain in return may differ according to their preferences. For instance, if an actor lusts for minimizing the risk of failure, she may select more incremental tasks with more certain outcomes. The opposite is pertinent as well. Actors may select risky work for the sake of self-improvement. This is in line with Nesrin's request for working in up-segment products in order to learn something new and develop her skills. Hence, the divergent preferences of actors and departments may be a reason behind the conflict between departments. Additionally, a lack of shared understanding affects creating a team spirit at the departmental level negatively, as Burçin explains in the below quote.

[23.4] When we have problems with other departments, we get quite nervous. Purchasing is one of them. Mostly, they say I send incomplete information, but I claim that I didn't. For example, sometimes I say, 'no, he does this because he doesn't want to deal with this'. You know, my expectation is different from the purchasing department. Maybe they think in their own way that they shouldn't be paying attention to that, or that they don't have any employee to attend... same as with the production. They say I gave this, I did not know that, I knew this, like... Due to lack of information or everyone focus on their own work. The other department's job is always second to them. Production wants to produce first, like, does not want to deal with my product. I also want them attend to my product first, and make a production plan accordingly. We have such conversations and conflicts.

Here the point is that every department has different priorities which can be evaluated as a result of ongoing concurrent tasks or lack of a team spirit. Having different attitudes and mindsets is compulsory for design collaborations because the tasks involve many different aspects and require diverse abilities. At this point creating a team spirit between departments can make the process flow as smoothly as possible

with the support of different departments by the consciousness of serving the whole. On the contrary, if departments act individually, actors from the *same* disciplines working in *different* departments can have a conflict, as well. Nesrin experienced conflict between her as a designer working in the product development department and the designers working in R&D department as follows:

[21.20] On that design, we, I mean me, was expected to modify through changes by acting as product developer. Of course, they were not satisfied with those changes. Because, on the one hand, of course, the departments also have an ego, I mean not only do the individuals have an ego. Then it won't be their design, when it was developed with my intervention. Then it was redesigned. Thus, much time was lost in the meantime. I was pressured more, of course. Such processes can happen.

In this case, the problem is between actors from the same disciplines working in different departments. So, the attitudes towards the task can differ in relation with the departments instead of the disciplines. When the difference in the attitudes of departments is combined with the power imbalance between departments, the result inevitably harms the team spirit. Burçin says:

[23.2] here begins the product management-design conflict. You know, sometimes whoever is more dominant, that can make the decision. I mean, now the designer likes red, but marketing believes that red would never sell. For example, this is a very big point of contradiction. But, like I said, the pressure from the designer probably comes from something, that is, something prestigious, I mean, he really wants to offer a design work. But there's also data and facts. Marketing believes that it can't be sold. Well, I can say that whoever is a bit stronger wins. We experience such things, you know, the strong, in what sense is strong, you know that is not clear. The product management may have it cancelled if it is too dominant. But the design department says that this is my product, it will be like this. This is the case.

Until now, the quotes were mostly on the negative effects of different attitudes and mindsets of actors from different departments on the collaborative design process. However, Olcay evaluates the situation from a different perspective and benefits from the difference between departments to create a motivation factor. He says:

[30.1] as design cannot win by saying that I want it like this, another department cannot win either by saying I want it like that. Everybody's explaining their reasons. I think, finding the right things within a discussion by developing yourself, the joy of that creates the motivation. (...) [30.3] In fact, people find themselves in these fights and competition not because they believe, but to protect their fortresses. As design, we expect to make the customer and the designer happy with the point we have in this sense - that the product looks beautiful - considering the values that we provide for the product. That's what we're after.... [30.4] it is actually a great motivation to try to protect one's castle. I mean, as a design, the design department should support its idea in order to protect the work done (...) because there may be tens of thousands of questions that may be asked. In order to be ready for these questions, strengthening himself or the weaknesses of the design, if any, trying to provide for it, I use this as a motivation tool.

It is better to consider the conflict between departments arising from their different attitudes and evaluations about the task as a motivational factor if the team is to keep creating together in upcoming projects. Olcay says:

[30.13] There are tens of engineering departments, each with their own scorecards, each with their own goals to achieve. Nobody can reach their target 100%, because one reaching their target also means that another not being able to. So, it is a situation like that, I mean it will not be as any of us wanted but also it will be somewhat as all of us wanted. There are so many factors in this, I mean, the desire of employees from every department to do that job, to the character of the director or manager of that department; I mean how he positions himself. In fact, more or less each meeting goes on like a strategic battle. Everybody comes with their trump cards, they may not spend all their bullets there and try to convince each other, it's not possible for this to progress completely as a struggle because the same team needs to work together again in the next project. Therefore, the referees must be good, like, me doing as much as to fulfill the requirements really and perform usually is effective in getting what I want.

As I explained previously, it is expected and necessary to create a team composed of actors having different attitudes and mindsets in order to have a qualified team for design collaborations. In such teams, design decisions may differ between departments. So, defending the design decision against other possible alternatives necessitates being well-equipped about the suggested idea. This may not be evaluated

as conflict between departments. Conversely, it can be evaluated as an opportunity to motivate team members to create better solutions that they can defend towards possible criticism. If the departments and actors evaluate the process with this attitude, it may result in a better solution to the design problem at hand.

To sum up, it is hard to create a team spirit between departments in creative design collaborations because of different attitudes and priorities of different disciplines. In such cases, the point is to derive productiveness from differences and create environments for productive discussions where every actor feels obliged to be well equipped to defend her idea with respect to each other. Work environments where actors respect each other and have a professional attitude which prevents taking the discussions personally will help create better solutions for design problems. It is also interesting to realize that actors from the same disciplines working in different departments may have different attitudes towards design problems. It is not only because of different mindsets or evaluations, but also because of the lack of a team spirit. So, creating a team spirit in departmental level serves the motivation of actors both towards collaboration and the task at hand unless, the actors insist on a design decision only because it belongs to them.

4.3.3. Managerial level

Creating team spirit in relation with the managers' attitudes affect the intrinsic motivation of team members towards both the task and collaboration. In this section, I will analyze the effect of the managers' attitude on the intrinsic motivation of actors from three perspectives, which are (1) the experiences of team members; (2) the experiences of mid-level managers; and (3) the experiences of managers. Actually, the team members do not stress the effect of their managers' dedication to the work on their motivation at all. It was the mid-level managers and mostly the managers who value creating a team spirit in relation with their attitudes towards the task and collaboration that stress this. Since I did not interview every actor working

collaboratively on a project in the second phase of this research, I was unable to compare and reveal if the managers' intentions to create team spirit at managerial level reflected on their team members. However, there are team members who stated the positive effect of their managers' attitudes on their motivation towards the task and collaboration. Erol is an employee influenced by his team leader's attitude in positive way. He says:

[10.3] Our executives, team leaders, or rather, Mr. Metin - you have already talked with him - Mr. Metin is someone who directs us in every sense and gives us ideas, easily, by discussing and compromising.

Burçin also believes that the managers' attitudes affect her motivation. She states that an efficient manager should be well equipped with the knowledge in the sector and should not be affected from any of the departments as a consequence of the lack of knowledge. She says:

[23.15] The biggest positive factor for me is that the project manager knows what to do. The fact that their new ideas do not change with anything is a factor. It is required (for the project manager) to be progressing in her own way with firm steps. At the point where she is being affected too much by the other departments, everything becomes really confused. (thinks) So knowledge is important. I think the experience of that person is important. For us, people from different disciplines come to product management. Previously, yes, she worked as a product manager, but in a different sector, for example. I think these are very important. In other words, an experienced manager has an enormous impact compared with a manager who is inexperienced or coming from another discipline - in this business, in this sector. Because if she comes from a different discipline, on the other hand, because she is trying to learn and get information from everywhere, everyone, different from others, the process required to experience and compare results is a long period. I think it reduces her decision-making process and her ability. Always needs direction.

Deriving from Burçin's experience, it is obvious that managers have to be equipped well with two abilities, which are (1) to have their own way of doing things and a path to follow while managing a process, and (2) to be well equipped with the knowledge

about the sector. If the team members do not trust the abilities of their managers, it turns out to be a demotivating factor, as Bekir experienced:

[34.9] In the end, the man (manager) who selects (the project) is usually an engineer from R&D. They don't understand design. Maybe they're thinking in a too old-fashioned way. So, with their choices, something is chosen, which becomes your work. I think it's very demotivating.

Drawing on Çağatay's observations about the effect of the managers' attitude on members' motivation, trust and belief towards the knowledge and vision of the manager seems to be a key factor to create a team spirit at the managerial level.

[29.31] They feel it when I work by my heart. They turn to that. They tend to work like that. If not, they do this: they don't keep that person among them. I can tell you that freely. Let me tell you: for example, they say, if one of my friends is thinking of not contributing - one of my friends on the project team - they immediately criticize each other if they don't believe that she contributes to the project. They have quarrels among themselves like how can you do such a thing, that guy protects us like that, how can you embarrass us to Mr. Çağatay while quarreling like this. I mean, I swear, I appreciate myself sometimes to enable this. That is, because they criticized each other a lot by saying this can't be done. (...) [29.53] then they begin to believe in me, begin to trust me, begin to believe in my vision. After these three happen, I can say that we won't work here tomorrow morning and gather the team and leave. So, no one can say where this team is going. They believe in me. They know I won't stick them in the mud. Do I make myself clear? I mean this is very important. When you provide this, when you ensure this trust, you become the leader in the team. What I want is that, I mean what I want is to be a leader for this team, train leaders from this team in time.

As Çağatay explains in detail, he created a team of actors who believe in and trust him as a manager. Although it seems like they are a powerful team at first sight, it is not the case if the manager leaves the team. So, if the teams are actor dependent at the managerial level, the success depending on a team spirit is not sustainable.

In addition to the opinions of the team members about the effect of their managers' attitudes on their motivation, now I would like to explain what mid-level managers –

in some companies, team leaders – experienced about their managers' attitudes. Below I quote two mid-level managers, Metin and Berrak, to illustrate the effect of their managers' hardworking attitude on their motivation towards working in the same way and owning a task.

[14.12] Metin: How much we love Mr. Hüseyin? As long as he put two stones on top of each other. Indeed, it is. I mean, if Mr. Hüseyin does not put all his gains and all his ideas - which are very forward-looking - on top of each other, I might not work so well. Because he does, I feel the need to put in an effort, too.

[32.1] Berrak: When you have a general manager, who was made for this job and works all day and night, of course you also work hard (says with a smile).

I would like to note here that the psychological management of the process is as important as the systematic management of the process and it can be ensured by the attitude of the managers towards the work. Erman is a mid-level manager who believes that the attitude of the employees is being affected by the attitudes of the visionary managers in the company.

[3.15] There is something in the people here, I mean, the employees have a vision, this is very important. First of all, the person in the lead has a vision. To be clear, this spreads downwards.

Damla is another mid-level manager who is highly being affected from the hardworking attitude of her manager even though she believes that being influenced by the attitude of managers towards a task is not a professional stance. However, this is actually what creates a team spirit at the managerial level and managers can take advantage of their impact on the motivation of employees. She says:

[24.10] We have our vehicle supervisors, friends who normally run the project. These are usually administrators or managers, well, engineer friends, expert engineer friends. You know, their attitude, even their personal attitude and what they put forward for the project can alter our attitude indeed. When you

see that she really works hard there, you can actually be motivated and work with her. You know, it is a little bit related to our Mediterranean region or Turkishness. Maybe you know (laughs) her attitude affects your attitude while working, even if it is not very professional.

She exemplifies in what ways great efforts of her manager affects her attitude towards the work as follows:

[24.13] If I see that the product manager really puts a lot of effort into that project. For example, I put more of my effort with response to her effort. In other words... What does it mean? It affects my work for sure, like, I can come to the points that I think of that project outside of working hours. But if it is... When I think that the manager does not give the project what should really be given, this time I do as much work as I have to do. That is not doing me anything, it is just affecting my extras. I can say this. Namely it's affecting my extra work. (...) [24.14]. As I said before, the manager's attitude automatically affects the attitude of other teammates, too. So, you can actually own a project all together.

Drawing on the interview data, it is obvious that mid-level managers are being affected by their managers' attitudes towards the task and reflect on this issue in the same way as the team members. So, managers' hardworking and visionary attitude can be evaluated as a factor affecting the team spirit and motivation towards collaboration in design processes.

In a similar way, managers are also aware of this issue and during the interviews they stressed many times in what ways they spend effort to motivate their team members towards the task and collaboration. From now on, I will set forth the managers' efforts to create team spirit and the methods they benefit in order to achieve their goal. As a design manager, Damla believes that respect in a team starts from valuing teamwork in design collaborations. She says:

[24.44] Because you prefer to work with the team, people on the team can be more moderate towards you, because the person who chooses to work with the

team actually respects the idea of the other person. When it is like that, you don't impose it, the point you impose is what you really think it should be.

As a production manager, Çağatay values the contribution of every worker in the company to the quality of end product, starting from the baseman and he tries to make his team members understand and believe that all the workers in the company work for the quality and success of the products being produced. He tries not only to create a team spirit in his core team, but also to enhance this spirit until it includes all the workers in the company.

[29.79] Now look and let me tell you, improving quality is one of the biggest aims, and that is the essence of being a producer. Now I ask my friends one by one – I didn't do it collectively, just one by one – ‘who is responsible for the quality in this factory?’ The rumor I'm spreading right now is: - I am saying clearly, I'm spreading the rumor because I'm going to ask this – I ask ‘who is responsible for quality in the production of the factory?’ My friend's direct answer is ‘the quality manager’. Well, I say ok. It's the quality manager; but, I don't think like you. ‘How?’ he asks. The only thing I think is our baseman Mert, you know, baseman Mert is responsible for the quality of this factory. ‘How brother?’ he asks. I say it is very simple. The better Baseman Mert cleans up this factory, you will work in a clean and better factory. You can't do dirty work in the clean factory of baseman Mert, do you know what I mean? You can't do dirty work. you do a good job. If you do the job properly, Çelebi does the job properly, your friend on the other team does the job properly as well. You see, you do a quality job. So, I said, in this case, who is responsible for the quality of this factory? Baseman Mert. Do not forget this, I said. Now it is going like question-answer. Somehow, that would finally come to me as a gossip. Baseman Mert is responsible for the quality of this factory. I'm going to explain this at the meeting in the following month.

Çağatay enhances his team by making his team members be aware of the contribution of some other actors who are not directly contributing to the process. As a result, he tries to create a team spirit not only limited with his team identified by organizational structure, but also in the company in general. In order to create a team spirit specifically in his team, Çağatay developed a method that creates an environment which supports open communication between every actor. He explains his method as follows:

[29.80] At the beginning of each month for the last two months, I've been having a hoop meeting. I'm gathering my entire team. We're building a circle. Everybody's looking at each other's faces. I call it assembly... Look friends, I said, for this, say assembly, say Friday, say be together, what you say is not important. The main thing here is to look at each other's face. If you can look at each other's face, you have no shame on each other. So, we're not enemies. We're friends first. Because enemies cannot face each other unless they are thinking of killing. Then everyone shares their opinions with sincerity. And I'm doing this month's review there, such as how many vehicles we've built, we've been working this long, our goal is that, we have quality problems, our quality problems are that way, we have achieved our goal this month, we'll be better next month. Whatever. Your food changes in that way, be careful with the entrance and leaving time. I take questions, if any. And I usually sound the others out when I'm having this conversation. I always do it. That is my job. I ask 'Mr X, how can we solve this pollution?' I sometimes get some reflections. Now the summary of this month's talk is already quality. So, I've been processing quality since the beginning of the month. Do you know what I mean? When I ask who is responsible for the quality of the factory at the end of the month, the answer I want is 'all of us'.

Çağatay is a manager who strives to create a team spirit among all the employees in the company by developing frank and respectful communication and valuing their contribution to the success of the company. Canan is another manager who wants to spread the consciousness of being a team. She benefits from the language being used in her team since language has an effect on creating a team spirit which transforms 'I' to 'we' and 'mine' to 'ours'.

[22.20] The project is not our project, so it belongs to all of us. I'm trying to give them the thing: this is the project of the entire team, not yours, not mine, none of us. The important point is our success, the success of our company. All my friends tried hard to make the project successful, I thank them. When one could not do it, the other came and helped and taught the missing part to his friend.

This perspective also reinforces the development of a collective consciousness where all the actors believe that the success is only possible with the help of every actor who contributes to the project. It also supports creating a team spirit where the actors trust each other and value the existence and knowledge of every actor in the team. In the

same way as Canan, Çağatay cares about transforming the ‘I’ language to the ‘we’ language. He says:

[29.71] We are playing a team game. Everyone will talk to the other. There is no ‘I’ but ‘we’. If I hear something different than this, I argue. [29.94] When we give up behaving like ‘I know’ as a whole, and listen to everyone accepting that they have different mindsets, educational backgrounds, and their own ideas, then the project is solved.

Creating a team spirit at the managerial level is not only valuable for the sake of design collaborations. It also helps every team member to have better relations, which may affect the quality of time spent at work. Çağatay expresses the effect of developing good relations with whom actors spent more time than their family members as follows:

[29.47] Our aim is obvious: so, let’s be friends, we are friends and I am the leader of that friendship group. What did you do? We are preparing a project. We have at least 26 days together here, we start at 8:00 a.m. every day and finish at 6:00 p.m. or sometimes we don’t really know when the work is over. We spend more time together than our family. What we have to do here is very simple, that is taking advantage of each other's differences. There is no other matter.

According to my findings, creating a team spirit at the managerial level actually starts with valuing every actor and their opinions. In order to motivate his team members to work effectively during design collaborations, Olcay values being fair towards every actor more than any other factor. He says:

[30.19] One of the most important ways of increasing motivation of employees as a manager is being fair to the workers who work for you. You may not be a good person, you may not speak properly or morally, but you cannot break the feeling of justice. If you do, you destroy the system. Because you probably know who is hardworking, who is not. You will be questioned when you don’t benefit from hardworking workers. I think one of the best things to use as a source of motivation is justice. You have to treat everybody fairly and honestly. You have to give awards or punishment in the same way.

Olcay's interpretation on the effect of fairness on creating a team spirit and motivating actors towards collaboration is in line with prior studies claiming that fairness in compensation across organizational members is a factor that helps maximizing output by means of increasing motivation of actors towards collaboration (Wolfe & Loraas, 2008). So, it is not enough for the managers to be hardworking and courageous to succeed, they also should be fair in order not to harm the team spirit. Although Olcay does not evaluate speaking kindly to his team members as an important factor, Çağatay is careful about not being offending towards his team members.

[29.38] Look, no one in my team has ever been scolded by me, I yelled at no one. I only criticize. I criticize by asking their opinion such as 'how could we do this work, tell me'. That is all. I mean my friend does the criticism to himself that I will do to him. Do you understand me?

Canan is another manager who values being kind to her team members. Even when she wants to warn her team members about their faults or inadequacies, she wants to make them realize the situation, instead of directly criticizing them in a harsh manner. She says:

[22.17] People can accept what they offer easily. This motivates people and makes people friendly. You shouldn't behave in a strict manner. Instead you should say, 'look my friend, I know you well, you are very talented, I want you to reveal your skills'. My approach is like that. I say you are talented but do not use it much. How can we develop it? In your opinion what can we do to develop it? These are necessary for your development. In this way, I state their good sides and want them to talk about their bad sides.

As seen from the above quotes, the methods that managers use to create a team spirit are not technical or extrinsic, but psychological and intrinsic for white collar workers. Actually, creating a team spirit at the managerial level is not only related with issues about work. It is important to create boundaries between managers and team members about their life out of work. Olcay is one of the managers who is aware of this issue and benefits from it at work. He says:

[30.60] Psychology comes out a little bit in white collar workers. I consistently do one-to-one meetings with all my team once every 15 days. We do not talk about work in this one-to-one. I talk about their improvable sides to develop in their life. I learn from them; they learn from me. I ask about their experiences. What did they do or how did they behave in different situations, what could they do? Why did they do so? I expect its effect on their work.

He values their private life and development. Because, as he said, [30.61] ‘only when I touch their lives, what they do at work can change’. Another manager who is aware of how having tight relations out of work with his team members reflect on the team spirit at work is Çağatay. He believes that this attitude also helps creating respect despite the differences between team members. Here are the ways Çağatay deals with his team members out of work.

[29.36] I try to know their private life. Do they have sweetheart, if single, how many sincere friends have they got, have they got cars, where do they live, how many people are there in the family, how are their parents, how many brothers or sisters have they got, when is their birthday, when is their wedding anniversary, the names of their children – the most important thing for me – their age, grade, etc. I follow all of them. I sincerely say, I care about all these things. For example, the food they like – my wife is a good cook– I sometimes take them home if my wife cooks their favorite food. I sometimes invite them. I say ‘my dear friend, my wife cooked eggplant with minced meat, come to my house for dinner’. It doesn’t matter for me. What happens if he comes for dinner? I will be happy when he comes for dinner with his wife or girlfriend. (...) [29.46]. We know each other’s families in our team. We go for a picnic in summer once or twice all together. There is no such culture in the company. Do you know what I mean? Why do I provide this? All of them have a different world view. For instance, there is a man who prays five times a day, a different man. The other is an old revolutionist. I am the advantageous person in the company who sets a table for these two men and makes them work for the same project. I combine them in the same project. I use this until the end.

Here, Çağatay creates an environment that every employee is close to him as a friend with all his or her diversities, whereas they are committed to their work as if they only have professional attitude. A critical point here is to be close enough to share the details in team members’ private life, while making a distinction between the attitude

towards the issues related with work and private ones. Olcay claims that the key to achieve this goal is related with the personality of the manager. He says:

[30.58] I'm in on people's lives a lot. I'm in on their lives psychologically not strategically. I mean I spiritually help and support my worker whose father is suffering from Alzheimer or sometimes materially by giving permission as much as I can. Also, I try to set a position for myself that any worker can tell me her/his problems with her/his husband/wife or sweetheart. Here there is a hard point. You shouldn't lose hierarchical relations. This is related with the personality.

In order to compare how the attitude of managers reflects on the team members, I will explain the experience of Berrak, who is the product manager in a furniture company. She expressed that she got closer to her colleagues – both her managers and team members – when many of them came to her wedding and shared her special event. Here is how she experienced that contribution:

[32.22] Maybe it is very simple, but on my wedding day there were a group of people there, they came willingly, including the head administration. For me it means a serious feedback. This event that I have experienced recently made us get closer to each other. Because some people came whom I didn't expect to come and their preparation for me etc. was very valuable for me and also it was a kind of support for me.

So, the personal relations and support of managers towards their team members have a positive effect on the team members' intrinsic motivation and make them feel attached to the team. According to the managers, creating a team spirit between blue collar workers is similar to the white-collar workers. The only difference between them is the communication style. Olcay believes that a manager can get what he expects from the blue-collar workers only if he is sure that they really understand what is expected from them. He says:

[30.59] Blue-collar workers have actually different characteristics. In order to communicate with them, make them work; there is nothing you cannot get if you can tell them what you want.

This is in line with the need of creating shared understanding between actors even though they have different work languages. In order to make the blue-collar workers understand what is expected and motivate them to collaborate, Çağatay tries to explain the workers' contribution from their perspective. Here is an example explaining how he deals with such issues:

[29.98] Well, now I'm telling my team the following: The products we produce in export are very important. How would you explain this to a primary school graduate craftsman who has been working for 20-25 years? You have to develop methods. The method is very simple. I say, 'brother, the money of foreigners is very precious'. That is all. Give the man what he can measure. I say, 'brother, the money of foreigners is very precious. Their one lira is our seven liras, I said. So, we need to make these cars sparkling. Because we say one lira and get one lira for the cars we sell in Turkey; but there, with their one lira, they get seven liras'. Hey presto. ... You have to tell him in a way that he can measure. You have no other choice.

When managers value and respect their team members, they also respect their decisions. However, it does not help to make a design decision from many alternative design solutions. In this case, their attitude is to learn the reasoning of design alternatives and discuss with the team to find out the best solution, as in the case of Damla.

[24.37] Everybody wants her ideas to be used. For example, if there are contrasting ideas, I ask why is that logical or why isn't that logical? I ask their reasons, and then we evaluate these ideas in teamwork.

It is also motivating for team members to be valued and noticed by the management, with whom they do not have a direct communication. Çağatay tries to create an environment where the team members get in contact with the management in order to increase their motivation by feeling that they are being valued. He says:

[29.26] Something emerges, I made that product pictured and reported. My friend sends this report to the senior management directly by e-mail or presentation at the meeting. I try to include him in the work. He transfers information directly to them. So, management is becoming aware of his

existence. As I open the direct communication and I am not a whimsical manager, the worker feels self-esteem. He also respects me. That is so interesting. It is a different type of developing respect.

On the contrary, when managers ignore the contribution of their team members and insist on their design decisions without any reason, the team members feel demotivated and nervous. As Damla experienced, she does not feel that her ideas are being valued when managers insist on their ideas without discussing them.

[24.26] For example, some of the project managers have a very repressive attitude. That is, they have ideas in their minds. They try to make you perform it. When it happens like this, I am stressed. Well, in fact this is not the right idea. We can produce the right idea. Well, your idea is also important for me but it is not right. If he dictates his ideas, I am stressed. Sometimes this happens.

Deducing from the interview data, creative individuals tend to generate new ideas and offer alternative solutions instead of following a predetermined path. As a design manager, Damla evaluates her attitude towards the team members from this perspective. Even though she values the contribution of all the actors mentally, she sometimes reacts in a different way, insisting on her ideas. She says:

[24.45] There are some imposition in vain – we meet such designers – not agreeing with them affects our project in a positive way. I think we must put ego somewhere apart from us. However, sometimes I also have some egos. I want my ideas to be accepted and I insist on them. I am not a great angel (smiling), I try to stay away. If there is a better idea, I go towards it or I combine two ideas and develop them. That is my ideology.

To sum up, in order to create a team spirit at the managerial level, managers value the psychological management of the process instead of its systematic management. They value and respect their team members both as experts developing ideas and creating solutions to the existing problems and their friends. The ones who deal with their team members' problems and private lives out of work feel that it affects their attitudes towards work and develop trust and commitment towards work and their manager. It

sounds positive to feel attached to the manager while creating team spirit at first sight; however, it may result in a breakup of the team when the team manager leaves. Actually, at the managerial level this is inevitable, since managers create the team spirit with their personal relations and respect towards their team members. However, it is better to assume teams as flexible and alive structures that may change form and structure in time.

4.3.4. Company level

Teams are not limited to departments. All the members working in the same company can be evaluated as a team who work together to create a product although they are not directly in contact with each other or collaborating intensely. Additionally, companies have characters that position them somewhere in the sector and in the eyes of their customers and workers. This also has an effect on creating team spirit in teams. I named this ‘creating a team spirit at company level’. The inferences I will make in terms of the role of the company as a whole on creating team spirit is not specific to design collaborations. They are more generic, that is not limited to a specific situation.

Like managers, companies may value their employees and show it in many ways to all their workers in order to create a team spirit at company level. Berrak is a product manager working in a furniture company who feels attached to the company she works for many reasons, which are expressed in below quote.

[32.29] How does the company satisfy me: it’s like, financial resources, career opportunities, the futuristic attitude of the senior management, saying ‘you are my candidate for this position’, I mean, their attitude towards protecting me, or not leaving me alone on my special days, for instance...

Nesrin is another designer who feels attached to the company she works for. She feels the pleasure of working in a company that values design as a profession and the designer as a precious worker.

[21.10] Here is an important point: When I observe this as an industrial designer, everybody values this job, it is a company that employs industrial designers for different positions, as I said.

Additionally, she is fond of the social prestige she gains via the recognition of the company she works for. Here is how this factor affects her motivation although she expresses that it does not matter which company she works for.

[21.8] Personally I don't actually mind where I work. I worked in some irrelevant jobs. I changed many jobs. It surely gives you some prestige socially. When someone asks where you work, you say X company, there is no one who doesn't know the company. They say surprisingly 'oh aa you work that company?' They say they have seen the ads of the company; this also motivates me, as well.

As the managers' work efficiency motivates employees towards work, the companies' success and recognition reflects on the motivation of the employees positively as well. Like Nesrin, the prestige of the company affects Erman's motivation in many ways. Worldwide recognition of the company makes him feel powerful in the sector and affects his performance positively.

[3.17] We are here today; I call a design firm in Italy one day and can talk very comfortably. I always keep in touch. It is about me and my company. When we or someone goes to Italy or anywhere related with the sector we go with the name and label of the company. Everything is different with that name. We have its positive effect. It is the same with the design firms. When we go there, in fact we don't ask for the available designs. We say, yes, your work is good but we will buy them if you develop these products in the form or format of our company. We have still negotiations with them. So, it starts from here, you know.

There are many other ways that senior executives can benefit from making workers feel valuable and motivated to be a part of that company and project. For designers it is critical to feel that the company values design. Canan explains that the company shows its attitude towards design as a profession by considering design as the core of company and providing opportunities for the development of designers.

[22.22] There are some points that motivate people. There are establishing a design center, carrying on with it, expressing its existence with design, support of the administration. In other words, they can go to many fairs with friends. Ours presents some opportunities here while other departments do not go to other places.

As I explained previously, employees are motivated by contributing to the success of a company or project (Sauermaun & Cohen, 2010), and also by the attitude of top management valuing their contribution. While we were talking about team spirit at the company level during the interviews, the issue got broader, including the services and opportunities that the companies offer to their employees. It is interesting to hear that a reason which makes Berrak feel attached to the company is the quality of the meals. She says:

[32.19] I swear, the thing that keeps me in the company is that it has an excellent dining room (smiling). I think this is an essential factor for a company. [32.20] I can say that sincerely, giving a lunch voucher is like, the company doesn't care about their employees' food. But we have a skillful food staff that does their duty willingly. They even prepare special food for our vegan employees.

In the case of Berrak, it is obvious that the motivation of a white-collar worker is affected and interrelated with the motivation of blue-collar workers in the kitchen as well. Ayberk also indicated that the services and attitudes of authorized people in the company towards the employees are interrelated with the employees' motivation. However, his experience was demotivating as he expresses below:

[33.3] There were problems with how the company treated its employees. The food was very bad. (...) I even observed that everyone who worked there for 6-7 years had a stomach disease. Because the oils used were very bad.

When companies do not value the development of their employees, or do not make them feel precious for the company, employees feel miserable about working there, which results in demotivation, as in the case of Tuna.

[35.6] As you see, for example, designers from other companies go to fairs. It is the logical thing. If you are designing, you need to learn from somewhere.

It happens with fairs, workshops, cooperation with the university. This time (in our case) managers and engineers go. They present to each other. There is an interesting system. This is the simplest thing. In our corporate culture, we do not give the job to the right person.

My findings show that employees value the appreciation of their efforts by the company in different ways. I will explain the effect of appreciation in detail in Section 5.1.2. Ayberk feels the same way as Tuna, indicates that he is not valuable for the company, judging from the managers' attitude during the design processes. Here is what he experienced during collaborative design processes:

[33.5] I sometimes felt I wasn't important and valuable for the company. I can see this in, er, that, I can see it in the process of my project at least. Sometimes my project was canceled, for example, I couldn't know about it for months. Because they weren't doing, er, they were not informing me that they will stop the project. They didn't inform me. You know, we were just like people working aesthetically when the project came.

Additionally, Bekir was feeling that the managers did not value design work, judging from the hierarchy set in the company.

[34.16] It's a sad detail that people you're dealing with don't value work. That is to say how can I say, for example, this is a miserable detail. The thing we do is making engineers evaluate our design as if they are design expert, they know the job but you don't understand.

In sum, showing their workers that they are valuable by the services and opportunities they offer, companies may help create a team spirit. However, the opposite is true as well. It is vital to be aware of the effect of companies on the motivation of individuals towards being a part of that company.

4.3.5. Discussion

As I explained in detail, creating a team spirit is a factor that affects actors' motivation mainly towards collaboration in design processes, because it is an interpersonal issue. However, it also affects task motivation since the team works for the success of the project. Creating a team spirit is about developing collective consciousness in a team that all the actors and departments should work in harmony benefiting from the different mindsets, work approaches, personalities, and priorities in order to serve the utmost goal: the product to be designed.

I analyzed the issue at four levels, which are (1) actor level; (2) departmental level; (3) managerial level; and (4) company level. Creating a team spirit at the actor level is related with changing one's attitude towards the task and collaboration depending on the performance or attitude of another actor collaborating. Nine interviewees expressed the importance and ways of creating team spirit at actor level, four of whom were employees. Employees value personal relations, supporting each other even out of work, and the friendly manner of their teammates. Some employees value developing personal relations because it supports open communication between actors that may result in working in harmony and less conflict. However, it is vital to create a balance between friendship and a professional attitude in order to get rid of the negative effects of taking things personally. Knowing each other well and having similar attitudes towards work – which may be a result of having similar mindsets – is not always beneficial in design collaborations. As some interviewees stressed, having different mindsets and work approaches may result in creating diverse design solutions that may also result in conflicting ideas. Here, I want to indicate that eight out of nine interviewees were designers, since it was designers who promote having different mindsets and diverse work approaches in the team. My findings reveal that differences in the work approaches are also related with the expectations of the actors from the work and process. Some actors may prefer risky and challenging work and facing conflict for the sake of self-improvement, while others may prefer to minimize

the risk of failure and get involved in more routine tasks that do not require creative thinking skills much. This is in line with previous research indicating the relation between the performance of individuals and their preferences such as selecting the project to work on, sharing knowledge, and close interaction with the team members (Dunbar, 1995).

Creating a team spirit at departmental level is mostly related with the differences of actors working in different departments as a result of their different priorities, mindsets, and work approaches. Employees and managers equally expressed the effect of creating team spirit at departmental level on their motivation. Based on the interviewees' experiences half of whom were engineers, it is hard to achieve creating team spirit at departmental level since the differences in priorities, mindsets and work approaches of team members working in different departments are the ones that the interviewees mostly complained about.

The differences in the priorities of departments sometimes cause conflict and interrupt the design process. Unless there is a team spirit at the departmental level, unnecessary conflict and iterations in the design process is inevitable, because departments tend to insist on their ideas only because they belong to them. At this point, it is vital for actors working in different departments to understand that they all serve the success of the end product as a whole, which may prevent departments from acting with ego and insisting on their ideas for the sake of protecting their status. Additionally, the diversity of mindsets as a result of the actors' educational backgrounds and work attitudes of working in different departments causes a competitive environment where departments create diverse solutions to the existing problems and compete for their ideas to be selected. This may cause conflict and can be seen as a demotivating factor for some employees, mainly as a result of knowing that there is a risk to be eliminated. However, competition between departments rooted in the diversity of ideas generated is actually what cultivates creativity. So, creating a team spirit at the departmental level serves for deriving productiveness from the differences. By this way, teams and

team members compete for the sake of the overall success of the team instead of acting with ego and fighting for preserving the current status.

Creating a team spirit can be considered in relation with the attitudes of managers towards the work itself and team members. Three employees and four mid-level managers stressed the positive effect of their managers' hardworking attitude, which makes employees spend more effort than regular work and obligations in return. When the managers leading a team are passionate about work, it may reflect on the team members. On the contrary, managers complained about not being able to spread their excitement to other actors and departments. In fact, they claim that the projects in which all the actors feel excited to results in success. So creating a team spirit by spreading the passion and hardworking attitude of the managers can help increase the intrinsic motivation of individuals towards the task and collaboration. In order to achieve this goal, managers benefit from some tools, which are: (1) valuing the contribution of every actor; (2) being fair to everyone; (3) creating an environment where actors trust each others' expertise and competence; (4) respecting their ideas and opinions; (5) providing open communication between the actors; (6) developing amity in company with a professional attitude; and (7) using a 'we' language. Seven managers stressed that these attitudes help create a team spirit and increase the motivation of actors towards both the task and collaboration.

The last and the broadest level that may support creating a team spirit is the company level. Inferring from the interviewees' experiences, creating a team spirit at the company level can be supported by: (1) companies' positioning in the sector that ensures social prestige to the employees, (2) valuing employees as a result of organizational culture, (3) supporting employees even out of work, (4) providing services of high quality, and (5) providing career opportunities for the employees which make them feel like they can get what they give. The effect of creating a team spirit at the company level may increase the motivation of individuals since it makes them feel being supported and valued as long as they give what is expected. So it can

give the message that the more the employees give the company; the more they gain in return. It is interesting that both employees and managers expressed that they are being affected from how valuable they feel in the company as a result of the corporate culture, which affects creating team spirit at company level. Beneath, six out of seven employees were designers who prefer to talk about in what ways companies make them feel precious, in detail. Lastly, it is important to note that team spirit is a broad term with many dimensions affected by the attitudes of every employee in the company and the organizational culture together.

CHAPTER 5

RATIONAL FACTORS AFFECTING THE MOTIVATION OF ACTORS TOWARDS THE TASK AND COLLABORATION

5.1. Introduction

This chapter is the second and last chapter examining the role of different factors on intrinsic motivation of actors towards designing a creative product in a collaborative manner. In this chapter, I will explain the *rational factors* effecting collaborative design processes.

I will examine rational factors under two major topics, which are '*personal factors*' and '*technical factors*'. Personal factors are the ones that the interviewees point out to be highly effective on their motivation mainly towards the task. Personal factors consist of (1) autonomy, (2) incentives, and (3) work environment and conditions. In technical factors, interviewees stress the factors that affect their motivation towards both the task and collaboration. Technical factors consist of (1) organizational factors, (2) team composition, and (3) process management.

5.2. Personal Factors

In this section I will present the effects of (1) autonomy; (2) incentives; and (3) work environment and conditions on the motivation of actors in design collaborations. Autonomy has an effect on both the motivation of individuals towards the task and creativity. None of the interviewees expressed autonomy's effect on their motivation towards collaboration. Incentives appeared as a theme with three dimensions which are (1) salary; (2) rewards and recognition; and (3) appreciation in the analysis. These are the factors that affect the motivation of individuals primarily towards the task.

Work environment and conditions has an effect mainly on motivation towards collaboration. The interviewees mostly stressed the positive effect of physical environment that provides communication for team members to come together whenever they want to discuss on the tasks. Work conditions have an effect on task motivation by providing opportunities for the employees to decide where and when to work which supports autonomy.

5.2.1. Autonomy

There are two main assumptions in management literature that evaluates the employees as (1) *pawns* who have to be directed when they step forward, and as (2) *players* that are self-directed (Deci & Ryan, 1985). Moving on from the former, managers distribute roles, make schedules, monitor the efforts of employees, set goals, and commit extrinsic motivators such as prizes. On the contrary, there is autonomy which let the employees behave on their volition and choice about what they do; when they do it; who they do it with; and how they do it (Pink, 2009). Autonomy is not the same as independence; instead, it gives people the freedom to pick their boundaries which have an enormous effect on individual motivation and performance (Pink, 2009). My findings confirm this as the interviewees express the positive effects of having a choice on where and when to work and have a say on the distribution of the projects.

There is consensus on the beneficial effects of autonomy on striving for new ideas and stimulating creativity based on previous research (Baumann & Stieglitz, 2014). The interview data verifies the positive effect of autonomy on creativity, as well. In design collaborations, the target goal and the time needed to reach that goal is being determined by managers. However, creative design solutions do not seem to be found in predetermined time and place in some cases as the interviewees indicated. Damla, a design manager, is fond of autonomy at work because she believes that autonomy

supports creative thinking by giving the employees the independence of choosing where and when to work.

[24.20] If the design process of that job is a month, I don't care where one works. At the end of a month, if one can give me the job I want, the product I want, in a way I want it, if one gives me the design, it's enough for me. She can work at the office or at home if she wants to. It's none of my business. For me, I have procedures in which I determine how long it should take to design a piece and how long it can take plus or minus. I give depending on those procedures. We have our own design procedures. I already give them according to those procedures. At the beginning, we agree at the beginning of the project, and then friends already give me the design within that time frame. So, well, for me, it doesn't make much difference whether she works at home or somewhere else. Because, like I said, you don't really know where creativity will find you. You know, sometimes you can't produce anything in the office, but you can work more efficiently in half an hour at home. So, there's no particular restriction on our team.

Saying this, Damla underlines the freedom of the team members on where and when to work but still within a defined time period. They are not totally independent, but free to choose. Since design process requires a high degree of creative skills, autonomy becomes more important as compared to the tasks that involve only mechanical skills. Nesrin describes how autonomy makes her feel comfortable and increases her motivation during collaborative design processes. She says,

[21.19] In fact, we are the people who make our own time plan within the macro planning. For example, this is a very relaxing thing, something that makes me feel comfortable. Other than that, the things in the followings aren't questioned: did you do it all the time, for example, what you did on a daily or hourly basis or what you didn't do; did you finish the job or not? That's a good thing, which makes you feel comfortable, you're organizing yourself. For example, the issue of time is not too much of a problem. If you want to come an hour ago, you can or if you want to leave the job an hour ago you can. We have the freedom to work from home once in a while, so we can use it if we want to. They make me feel comfortable. Other than that, of course, business life after all. The private sector is predatory. This is real. The things that I find overwhelmed and ridiculous are happening from time to time, but in general terms, working is like that. As I said, it doesn't bother me here, and I'm motivated by them.

Although managers are obliged to monitor the progress of the project and even give feedback to the employees about the progress, it seems like the attitude and wording of them even has an effect on actors' motivation and autonomy at work. Listening to Nesrin, I realized that the people who monitor the continuous progress of themselves and their teammates for the sake of the project as a whole are self-directed people who can be highly motivated through autonomy. On the contrary, as previous research asserts, most 21st century notions of management still revolve largely around control instead of autonomy (Pink, 2009; Green, 2006). Being aware of this notion, Canan is a manager who tries to make her team members feel independent under these circumstances by giving them a bonus project which is not included in her annual plan officially.

[22.27] I gave them a free project to get rid of this stress. All designers will have one free project by the end of the year. They will make them – at least – with their own free will. We never interfere, we just approved the subject seeing the design quality of the project. They presented it. They expressed their ideas, so they are motivated. They thought freely, the important point is that it can be produced. But the important point is to be novel (...). If they do, they will get money. That is something like this. They liked that, for example, they are motivated about it, 'we are doing something free'.

The attitude of Canan can be seen as a first step towards autonomy in a creative design team. However, the team members' autonomy is limited only to a bonus project. Still, promised reward in case the result of the bonus project is worth evaluating by means of mass production may be read as a sign of applying autonomy at work in general. My findings reveal that autonomy can be possible if the managers believe in the qualifications of their team members and let them follow their own path as a result. In addition to this, autonomy is also helpful in cases where the managers are stuck under too much work load. Nesrin mentioned such a case as follows:

[21.18] Our manager, department manager is not only product development manager of furniture production, but also product development manager of other product groups, 40 people are working under him. So, for example, he is

very busy and we are experienced as a team. What he said from the beginning is that whatever you say is true, tell me where you're stuck and when it is urgent. I try to help. But apart from that, we are free.

Deriving from this quote, I suggest that autonomy can be correlated with trust. Autonomy seems to be possible in case where the managers trust their team members and the team members trust each other. Olcay's following expression is also parallel with this inference.

[30.48] what I said is performed in the concept truck. what we said is performed. The truth is that nobody interfered

To summarize, in line with literature, participants' experiences confirm the value of autonomy in motivating people towards creative tasks in design collaborations. Like continuous progress, autonomy cannot be evaluated as a separate factor. It is also related with to what extent creative the task is. If the tasks require creative thinking skills and the team members deserve this, autonomy is helpful and efficient to motivate team members to reach the target goal. Both managers and team members mentioned the contribution of autonomy on the motivation of actors towards the task. Additionally, autonomy is intertwined with trust and taking initiative as in the case of Olcay. It can be seen that autonomy is a factor that motivates people during collaborative design processes by letting them make their choices on how, when, and where to work. This is why autonomy makes creative people feel comfortable by trusting their self-directed nature.

5.2.2. Incentives

According to my analysis, when people love what they do, their passion triggers creative thinking, and they become eager to handle the complex problem at hand in a collaborative manner. At this point, it is important to understand the relation between the effort employees spend and the satisfaction and pleasure they gain – both financial and emotional – in return, in order to maintain the mutual benefit between the

company and the employees. In the analysis incentives appeared as a theme with three dimensions which are (1) salary; (2) rewards and recognition; and (3) appreciation.

5.2.2.1. Salary

In this section, I will explain how actors evaluate the salary they gain compared to their expectations. Actually, salary is an extrinsic motivator; however, I included it in my analysis in search for the factors affecting intrinsic motivation of actors, since extrinsic motivators may enhance intrinsic motivation when they are informative (Deci, 1975), and administered in an autonomy-supportive climate (Gagne & Deci, 2005). So, I would like to understand and reveal if there is a relation between the money gained and the effort made, and whether it enhances intrinsic motivation of individuals.

One of the most passionate interviewees, Olcay, who experiences *'flow'* and goes beyond his limits while working on design projects, explains that salary cannot be a source of motivation and it is enough to gain average money as compared to other people working in the same positions, no more or less.

[30.30] If you don't give the money in a very exaggerated way or if you give something on average, you can't motivate people with money but I realized that you could motive them with work. (...)As soon as money gets involved, there's another reason to go beyond just enjoying it. I think you're polluting it now. But when you don't give him any money, he feels like a sucker, and the thought gets dirty again. [30.26] If anyone who does the same job from the outside earns five times more than you and you know it, it will have a negative effect on you. But if I'm on average and I'm like the others, it feels like it's going to make an impact, but it's something that doesn't.

His metaphor saying *'money pollutes work'* is a striking explanation on why money as an extrinsic motivator does not help increase intrinsic motivation. Moreover, money as an extrinsic motivator may diminish task motivation of creative individuals. The reason for this situation may be the shift in the goal from the task itself, to the monetary

rewards expected to be gained. This inference verifies previous research claiming that extrinsic incentives may increase creativity in case they are tied explicitly to the novelty of the product (Eisenberger & Cameron, 1996; Eisenberger & Rhoades, 2001; Eisenberger & Shanock, 2003). Like Olcay, Berrak values gaining enough money to maintain her life in accordance with her expectations in order to feel pleasure at work. She says,

[32.35] The financial return is really important. This is undeniable. I mean, no matter how much I love it, if I can't really make or live my life, it doesn't turn into a healthy thing for me. I can't say oh I love my job I am very happy. They all seem to have a dose, a setting.

At first sight, it seems like Berrak values salary more than Olcay do. However, when perusing the quote, it is obvious that she is not talking about gaining more than others. She only emphasizes the importance of gaining enough to maintain her life on her own. Another interviewee who values joy more than money is Damla. She says, [24.47] 'You know, I have to really enjoy that job rather than making money in my life'.

In Damla's case, she was not talking about working voluntarily for the sake of joy. It is still important to gain the money that will be enough to maintain her life; however, it cannot be a motivator to keep doing that work or working passionately.

In contrast to the previous data, the interview data also reveal that some employees are not satisfied with the money they gain which result in loss of motivation and joy at work. Burçin mentioned the importance of money that she gains as compared to the pleasure she gets from her job. She says,

[23.19] Design, designing is actually something that should already be done with pleasure. But of course, in our country - at least where I work, when I think about the circumstances, the position - you can never throw money away. I mean, at least it's for me. Because I actually have to work and make money.

So, I'm not doing the design with a pleasure as I am not wealthy. I'm obviously not in that position. So now I'm basically doing my job and trying to succeed.

Burçin is also interpreting the necessity of pleasure while designing, but the prerequisite for pleasure is to gain enough money to go beyond the anxiety of surviving. This is also in line with what Olcay expressed in the beginning that it is important not to gain less than average, because it is important not to think about how to live on with a small amount of salary. As participants expressed, it is possible to talk about pleasure at work only after the money they gain is satisfying for them.

It is not logical to say that money is nonsense and a high degree of intrinsic motivation can result in paying less because the joy increases. However, gaining more money is interrelated with the pleasure gained from job. The more intrinsically motivated and satisfied people feel, the more they spend effort to succeed which results in gaining more money as a result of success. In this case, money gained can be evaluated as a 'result' which roots in a high degree of intrinsic motivation. Like many passionate people experience, the flow experience offers a high amount of pleasure and satisfaction that lets people do what they do for the sake of the work itself (Csikszentmihalyi, 2018). This is in line with the definition of intrinsic motivation which is *'the motivation to engage in work primarily for its own sake, because the work itself is interesting, engaging, or in some way satisfying.'* (Amabile et al., 1994, p. 950).

5.2.2.2. Rewards and recognition

In the second part of this section I will explain how actors are being affected from extrinsic motivators like rewards and recognition drawing on the interview data. There seems to be a consensus on the detrimental effect of extrinsic rewards on intrinsic motivation and performance of individuals in creative tasks, at first sight, as I presented in Section 2.5. Pfeffer (1998) asserts that 'extrinsic rewards diminish intrinsic motivation' and 'large extrinsic rewards can actually decrease performance

in tasks that require creativity' (p.116). On the contrary, Amabile (1997) asserts that rewards that enhance competence or provide information on how to improve performance – which she calls informational extrinsic motivators – are deemed beneficial for influencing creativity.

At this point I will present the effect of extrinsic motivators on creative work although my focus is intrinsic motivation, because, when specific types of extrinsic motivators support intrinsic motivation under certain circumstances, this improves creativity by effecting intrinsic motivation positively.

In order to increase the success of organizations, pay for performance is a widely used method around the world to encourage employee contributions to the success (Milkovich, et al., 2010). In a similar manner, in the interviews, I heard many different applications of rewarding creative individuals depending on their effort and success. However, the only employee who expressed the importance of assessing the performance of individuals and paying for performance was Burçin. She says,

[23.13] we have a management system called performance management. It is held twice in a year. We set goals here, so we have goals to work with other departments, so we are responsible for the goals of the entire company. We also have personal responsibilities, of course this is an indicator of performance. I mean, my executive has something to do with my performance. We're also interviewing and they are giving me an evaluation score. This is the biggest sanction. That score means; a financial sanction or a bonus. Financial bonuses and price increase are based on this rate. Naturally this is a sanction. I mean, the more I go up, the more I can get a pay raise.

It is remarkable to hear this from Burçin, who also expressed gaining adequate amount of money as a prerequisite of joy. On the contrary, a highly intrinsically motivated interviewee Olcay said in a previous quote that money pollutes work because it is being replaced with joy. Because of this resemblance, I think that there is an inverse proportion between pleasure gained from work and the expectation of extrinsic rewards. When pleasure increases, the expectation of extrinsic motivators may

decrease. Likewise, the effect of extrinsic motivators is expected to decrease when people are passionate about their work.

Olcay, who believes that project itself is a better motivator than money, is working in a company which benefits from pay for performance to increase success. However, he believes that even though it has a positive effect on performance, it does not last long.

[30.24] They have a scorecard they use. All the things you will do are shown on that score card on a time-based basis at the beginning of the year. You get points, financial bonuses, performance points and pay raise according to whether you can increase those things. Therefore, one of the things that affect people is money again, although the effect lasts in a day.

In the literature it is suggested that when rewards are deemed as informational extrinsic motivators that provide feedback on how to improve performance or competence and permits a sense of personal control, they may have a positive effect on individual creativity and can increase intrinsic outcomes (Deci, 1975). However, managers benefit from monetary rewards in order to monitor the employees' performance and make them catch their plans. When rewards are tied explicitly to the ways how a particular task should be performed, it turns out to be controlling, which undermines a person's sense of self-determination and diminishes the positive effects of intrinsic motivation (Amabile, 1997; Ryan et al., 1983). Nevertheless, controlling extrinsic motivators are still widely being used to control the performance of employees as Canan explains:

[22.13] I started doing something like this. I'm motivating the people more, who make their project really smooth and good. For example, there will be a fair or an event; for example, I can give them a little more priority, such as showing favor. ... I want them to see the result of the good and the bad. I wasn't acting like that, but I've been acting a little like that for the last year or so. I'm giving more to the hardworking employee. These processes are reflected in the salary. In other words, we are trying to make people own and develop their projects without having to put pressure on, and also by making motivational

speeches. Here, we say we're going to dinner; we are going to do something for you. So, we have such a process.

As seen in the previous quotes, extrinsic motivators are being used in design practice by the managers. The point here is if they work as expected or not. When I asked Canan if she observed an increase in the performance of her team members after her using rewards as extrinsic motivators, she replied that she did not. The reason behind this situation according to her explanation is that, it has been only a year since she started using this method that she could not get the results. Moreover, she explained that no matter what the manager offers, the performance of '*designers*' remains the same.

[22.14] Those who are late are late again. Whatever you do, they're late, so they don't care about life. Designers are people of very different characters, it is already difficult, well, hard to work, we are trying to accept them as they are.

Canan reflects on the attitude of the '*designers*' since she is managing a team composed of only designers. Different from the previous explanations, Berrak said that extrinsic motivators are not affecting people individually since the success of a person is interrelated with the success of the team and the managers. She says,

[32.9] (G) Is there an institutional appreciation mechanism? (B) Financial bonuses. We get financial bonuses. (...) Not every team or department is involved in this system. We are included in the bonus system as teams that are part of that main component, and it is the success of all of us. My success also affects my manager. The success of the design and the success of its director is reflected to all experts.

Drawing on Berrak's interpretation, it is important to understand the link between extrinsic motivators and success of the teams. Since the success of individuals is interrelated with all actors' efforts in the team, extrinsic monetary rewards can be set for the teams instead of individuals in design collaborations.

Rewarding value creating ideas of employees, regardless of its relation to the responsibilities of that person, is another extrinsic motivator being used to increase organizational success. Damla says,

[24.41] There is an offering system. Suppose that there is a system that you offer what can be changed in the product or company. Offering system is for this kind of developments. That system can have reward processes for you. For example, if that system likes your proposal very much, it can return you as gift card; maybe can turn financially or emotionally. In the reward program at the end of the year, your project can be selected and rewarded as one of the most successful proposals, so this motivates you.

It seems like rewarding people for their contribution to the whole system or company except from their defined jobs is being used to create team spirit. Understanding the issue from this perspective seems to support collaboration since it reminds people of their being part of a team and direct their attention towards the success as a whole.

Another interesting example from Damla set forth the effect of rewards on the recognition of employees when they are presented in front of all the employees in that company. This makes the rewarded employee feel proud to do that job.

[24.42] For example, you may be given a statuette award can be given. This motivates people as well. Because you actually get that award in front of 1000-1500 people. To tell the truth, you said 'I did this job', actually. These 1000-1500 people know your face. I mean, I don't know everybody, but everyone at the factory knows me. When you have that degree, for example, you do something, you get proud of this product you designed! You say to yourself I succeed. You can call it as *your* product and make an emotional connection with it. It makes you bond emotionally with your work. This positively affects people.

As previous research indicates, peer recognition is a factor that may enhance intrinsic motivation (Sauer mann & Cohen, 2010). Canan is another manager who believes that rewards as extrinsic motivators work well to increase individual performance.

[22.12] Remember that we said we are giving a project calendar; they have goals to comply with project calendars. Designers work in our company under financial bonus system. They earn money by catching up their schedules, projects on time and completing them early (smiling). So, there's actually a point that motivates them. Because their target is to receive their salaries. This is actually a person's performance assessment.

Here is a critical point that extrinsic motivators can turn out to be the goal itself and diminish intrinsic motivation of people towards the task at hand. In this case, the self-directed nature of creative people is being damaged which also effects autonomy negatively. These findings confirm the negative effects of rewards as controlling extrinsic motivators on passionate people in creative practice (Amabile, 1997; Deci, 1995; Ryan et al. 1983). It is also interesting to hear from the managers' explanations on the positive effect of rewards because it does not seem like corresponding with the employees.

5.2.2.3. Appreciation

Except from monetary rewards, there are also non-monetary rewards from which companies benefit to motivate and increase success of their employees. As Damla exemplifies, celebrating an achievement or completion of a project with a party is an example of non-monetary rewards.

[24.40] When a project is over, we are celebrating. You know, the manager's pastry dessert and stuff...People are working on a project, they celebrate with us because they spend a lot of effort with us in this project. When the reactions to the project are positive after the end of the project, it turns into bigger celebrations or smaller celebrations for the motivation of friends working on the project. It can be a motivation to do something like this for one hour in ten hours of work.

Doing something at work which is not directly related with the job but even belong to leisure time makes people feel relaxed and release stress. Enhancing the comfort of

the employees, and creating an environment to socialize with the team members, these rewards seem to improve their concentration and performance.

My findings reveal that employees value appreciation since it is a sign that their contribution is valuable for the company or the work being done. Being aware of this, Olcay who is a design manager benefits from appreciation to motivate his team members. He values making his team members' contribution to the project visible by admiration, spotlighting, and conferral. He says,

[30.11] Appreciating frequently, spotlighting – the designer who works for me – here, conferral, conferment of every actor contributed to the process... We act like creating a feeling that, well, we worked as such, and I gained something like this in return.

Employees value appreciation of not only the managers, but also other employees according to my analysis. Except from rewards, appreciation turns out to be a motivator for the employees. Here is what Burçin feels about appreciation of her work by other people in the company.

[23.20] When your design is being appreciated, you do it with more excitement. You want to see it in the shortest time. How do you understand that? As I said, you understand from the others' admiration. Well, when everyone says 'wow, it's wonderful' your motivation increases automatically. Hence, you work hard to create something better. So, what can you do? Well, you can develop your design, you can take higher quality renders – I mean you can improve visualization – in order to make it being selected or produced. If it is in the phase of production, you may want to deal with every detail one-by-one, for instance, if there is a detail that is shorter than you want, you definitely develop it to be in the way you want. If it is not in the color you want, you try to acquire that color – by searching for a new material, for instance. There were projects developed in a frank and sincere manner with high motivation.

Like Burçin, Tuna believes that the appreciation of the work via saying a sincere 'thank you' or expressing that the work is good is a motivator for the young generation employees. He even values appreciation more than money gained from work. He says,

[35.8] There is no reward or punishment system inside. We do the project and throw it away. You are doing and it is being produced. Actually, I do not feel happy even when something is produced, maybe I should. For instance, if people say thank you, or if they show that they appreciate it... I think showing appreciation can be motivating. I don't know, it can be better than financial gain for our generation. Because there are some platforms – open innovation platforms – we apply competitions, let's say to earn money with friends from the office, the things we made there are more innovative. We produce diverse ideas in shorter periods. Since quantity is important in such open innovation competitions – diversity of ideas – developing freely... The works are being appreciated there, both financially and emotionally – by means of appreciation of other people. This is something that motivates people.

As in the case of Tuna, it is obvious that people need to be appreciated by others as a result of their efforts at work. Appreciating financially or verbally may become a motivator which makes people work more diligently and do their best. In case of design collaborations, it may result in increase in both the quality and quantity of ideas generated. The only interviewee who does not value being appreciated by the company or his managers is Olcay. He even does not value prestigious design awards that they gained. He says,

[30.53] I do not care the international design award – maybe you know it – we gained actually. But I think it is important to make advertisements of this award at corporate level. We should tell it to public by exaggerating. But it can't trick me, in fact.

Being a highly intrinsically motivated manager, Olcay does not feel satisfied with the rewards or appreciation. This may be because his evaluation of himself and feeling satisfied with the work he contributed is over and above the evaluation of others since he is a self-directed person.

In sum, interviewees indicated that the salary gained in return for the performance of the employees is not a high-powered incentive when it is average. Employees value gaining enough money to maintain their lives in order not to affect their motivation negatively with the apprehension of subsistence.

My findings show that when rewards are being used as controlling extrinsic motivators that define strictly how a task will be done, it affects both intrinsic motivation and creativity negatively in design collaborations, since it prevents autonomy and self-determination. However, rewards providing feedback to the actors on how to improve themselves and perform better – which are defined as informational extrinsic motivators – are perceived as a positive factor that increases intrinsic motivation towards the task and collaboration.

Lastly, appreciation of the managers is a motivator for the employees in general, which makes them spend more effort than average to succeed in the task. Being visible and knowing that their contribution is worthwhile for the managers trigger employees towards working diligently and contribute more. In contrast to the detrimental effects of rewards as controlling extrinsic motivators, appreciation can be evaluated as informational extrinsic motivators which enhance intrinsic motivation towards the task.

5.2.3. Work environment and conditions

In section 5.1.1 I discussed the effect of autonomy on actors' motivation during collaborative design processes by letting them make their choices on how, when, with whom and where to work. Autonomy is a motivation factor for self-directed individuals in creative work. Under these circumstances, *'the place'* to work and *'the conditions'* created for people to work becomes an important factor in relation with autonomy, communication and the feelings of actors generating from those conditions.

During the interviews some actors expressed their opinion on the positive effects of working together in the same workplace even in open spaces. Haldun says,

[7.8] I think it is very useful to have people in the same office as much as possible. The fact that people are in the same volume not in different rooms, increases their interactions. It keeps the relationship warmer. Even a simple

separator leads to distantness there. That is to say this stuff... [7.9] You know, so we are human, we are not machines, sensuality is an important point. Sensuality is important in interpersonal communication. The better we keep emotional communication; the more space will contribute. Of course, when people sit on that computer, they will feel it as a special place of their own. But when she does the slightest move, she will feel that she is a part of such a team, and I care that there is an infrastructure that makes her feels so.

As a manager who has a separate office in the factory, Haldun is fond of creating open spaces for his team to trigger communication. He also believes that sitting in front of a computer creates enough private space for employees. However, when people from different departments work in open-space, it is sometimes disturbing for the employees who want to concentrate on their work in a silent environment as a result of the conversations continuing all day long. Burçin experienced such a case and she mentioned as follows:

[23.29] For example, we are at the table next to customer service. The department that we call customer service is the place where the complaints come and the phone constantly listens to trouble. This is a department that responds to all the problems and it struggles with all the problems during the day.

Having private offices for departments is sometimes compulsory since creative ideas have to be kept confidential. This is a reason why open spaces is not always suitable to work for creative design processes. Nesrin says,

[21.51] Information security training is being given. Namely, computers need to be locked up. Beyond it, product development department is a department that locks the door at night. In other words, innovations come from there. So it's intentionally made to be a little more isolated.

In addition to this, Nesrin also believes that the design of the work environment is not a crucial factor for her motivation. She experienced that happiness at work is not directly related with a nicely designed office because she worked in better designed offices than her current work environment where she did not feel happier than now.

[21.50] I worked in more beautiful physical places. Our physical environment is not great; but we have a product development room of our own. We work there as our own core family. We are not exposed to the dialogue of other departments. That's a good thing, we have a chance to work more isolated. Because there are times when we need to be a little isolated and stay calm. So the environment is separate, not an open office - because other departments are working in an open office - that's a good thing. But I don't have a lot of problems with my environment - since there are times when I work in more beautiful environments and I was more unhappy - frankly, being clean is enough for me (laughs).

Working in the same office with Nesrin, Burçin thinks that an office designed by its residents makes her feel comfortable because she feels attached to that place.

[23.30] Our departments are now separate. We're not too crowded, our office alone. We decorated it for ourselves, so our manager said something to us, take what you want. He left the decoration to us, so when we do, we feel our own. When we have our own choices, when there is no imposed furniture or imposed walls, when we choose them, it really affects positively. The office last year was more different than today, we decorated it ourselves. We actually became happier.

Based on the experiences of Nesrin, work environment itself is not a factor that motivates people if the employee is not happy or satisfied with the job. On the contrary, Burçin mentioned that nicely designed offices decorated due to the employees' preferences affect the employees' happiness at work. Deriving from two different interviewee's ideas, it seems like satisfaction from the work environment can be related with the character and the presence of other motivating factors for the employees. It can be said that job satisfaction is a prerequisite to motivate people more with the effect of work environment due to different personalities.

Work environment is an important factor for creating communication between team members which has an effect on team spirit as well. As Damla says,

[24.3] We work in the same building, of course. We work in the same building; we work in our R&D building. When that happens, communication is easier.

Since the entire team works in the same building, I am trying to find a solution to what they are doing. When they say, look, I usually go directly to look at their computer, discuss it there, discuss it on the computer of the relevant technician and try to find a solution there. So we're not actually meeting in the meeting rooms. Small teams are meeting around the computers. Then something more dynamic occurs, you know the environment occurs.

Based on Damla's expressions, it can be said that work environment affects design collaborations mainly by providing suitable space to come together easily and quickly. Although work environment is not a primary factor for motivation in design collaborations, it is important to consider the positive effect of proximity due to the spatial organization. It creates a dynamic work environment and direct communication between team members which goes beyond the design of the office for collaboration.

According to Damla, who expressed her satisfaction with her job, work environment is a tool for enhancing communication. She does not ascribe any other meanings to the office she and her team is working. Just giving enough space to come together and isolating her department from the others meet her expectations from the work environment.

[24.17] We didn't have a specific office four years ago. Then we went to a separate office as a design team in R&D. You go out to a separate office and work with a more core team, so you know, of course, you're isolated from the environment, which in fact allows you to direct your design faster and concentrate better. ... When the design team is in a complete office, we can do something; the exchange of ideas is easier. Can you have a look please? Are there anything that you see and I ignored etc. For instance, I put this line like that, suppose that I am working on a more fluid design. Maybe other designers can see something that I couldn't see. They can advise me to put the line in another way or advise me to provide consistency in this way. When we talk especially on direct sketch, it can turn into a black pen sketch talk. And you're in direct contact there. This is easier when you have a separate office.

According to my findings, the design of physical environment facilitating team work between team members is by default for design collaborations. Although a nicely designed office may not be a powerful motivator, it is vital to enable communication

by the design of physical environment in order to support collaboration. In addition to this, interviewees value how qualified their equipment are, more than the design of physical environment. Burçin explains that there are mechanical inadequacies that affect her performance.

[23.28] So this is really the working environment: the tools provided for you. For example, if I have a very heavy working computer, or if I think that I have a non-working internet. As I said, there are times that are defined to you, but there are external factors that we cannot fit in, then independent of you. There are - not my motivation or success - very mechanical things. My internet is slow, my computer is slow, I can't find a room to meet. Everything that affects my process lowers my motivation. In this sense, I think that the working environment is directly related to this.

In relation to this quote, I can say that while thinking about work environment, it is important to be aware of the effect of every space that the workers get in touch with in a company. As in the case of Burçin, not being able to find a meeting room whenever is needed, can be a demotivating factor, even though she is satisfied with the design of her office.

Seeking for the effect of physical environment, it is also important to consider every element in that environment. Oktay indicates that being able to adjust the lightning around is a crucial factor that affects the performance of individuals.

[31.19] An environment that a designer needs to work with, for example lighting, turning off the light, for example, is one of the important factors. Can she turn off the light at the top? Being able to control the light physically is one of the important things. That's one of the things I learned during the process.

The quality of the equipment being used during design processes not only effects the motivation of people but also helps them catch up the timings with the help of speedy work they provide. Damla says,

[24.18] We use our equipment, Wacom tablets directly, for example. We draw directly on them. Rather than drawing with a mouse, even drawing with a pen can actually take you further as equipment. The programs you use can be really effective. Normally, when using Catia here, for example, we do sketch in the Sketchbook. Then we use Photoshop or Alias, for example. The programs you use can be effective. We do our analysis in different programs, which seriously puts forward your process. So there are things which are developing, transformations are happening.

Except from the physical environment, work conditions are a factor that affects the motivation of actors in creative design collaborations. For creative work, it is hard to produce the intended work in between limited hours unlike mechanical tasks as I indicated in Section 5.1 in relation with the effect of autonomy on creativity. Designers expressed that this is why feeling free to choose the work environment and conditions and timing is valuable for creative individuals. Here is what Bekir thinks about it:

[34.18] I don't believe there is such a world that I will start designing at 8 a.m. in the morning and finish it at 2 p.m. If you expect this, people will find their own ways.

Likewise, Damla believes that creative activity cannot be limited between specific work hours. That's why she is not fond of working long hours at office waiting for developing creative solutions.

[24.19] I don't usually recommend shifts to anyone, because I don't usually leave my team on shifts. Because if you leave a worker for shift, you cannot get much from her work. For example, when that person takes her computer with her or when she takes her sketchbook with her, she works more efficiently when she is more comfortable.

Since creativity is not limited to place or time, strict office hours may not always be productive for developing creative ideas. On the contrary, it is necessary to come together and discuss the existing situations during design collaborations. This is why working in determined work hours with all the other actors by giving some flexibility is vital in design collaborations as Damla explains:

[24.99] You know, we work with other teams, we work with the mechanic, the bodybuilder, or work in the production or at the atelier we see the product directly in the work process, you need to go and make directly one-to-one interviews in those processes. So, we have shift hours.

Even though online communication tools enable working in different places and even in different geographies, the interview data shows that being able to come together quickly helps the process to flow in shorter periods.

From a holistic perspective (i.e. the work place as a whole) to the articular elements in the office (such as the lighting, and artifacts) work environment is a factor that affects the motivation of individuals towards both the task and collaboration. However, it cannot be evaluated alone. Workers ascribe different meanings to the work environment and conditions provided for them. As I discussed in Section 4.2.4, the refectory and the meals cooked for the workers can turn out to be a factor that makes them feel valued and precious for the company. Hereby, work environment affects the motivation of workers as a whole. Furthermore, a well-designed office is never enough to motivate people if they are not satisfied with other aspects of their job. To sum up, work environment and conditions can be evaluated important for the performance of individuals, however, it should not be evaluated with high priority.

5.2.4. Discussion

In this section I have presented participants' overall approach to the impact of (1) autonomy, (2) incentives, and (3) work conditions and environment on their motivation towards the task and collaboration in creative design processes.

In line with the recent research on the effect of autonomy on performance, my findings set forth the positive effect of autonomy on the motivation of actors during collaborative design processes because creativity is not limited to a place, time or condition. However, although the employees stress the need to have a say on what, where, when, with whom and how to create, they suggest that companies are not fond

of autonomy at work. They state that they feel to be monitored and controlled which harms the self-directed nature of creative actors. It is interesting that all the four interviewees who value autonomy as a factor increasing their motivation are designers. As a result of an environment where autonomy is not supported, the designers expressed that their motivation towards reaching the goal diminishes. On the contrary, high performance in relation with the monitored progress of individuals turns out to be the goal itself, instead of finding novel solutions to the existing problems.

In a similar manner, rewards seem to have a detrimental effect on the self-directed nature of actors when they are used as controlling extrinsic motivators. In this case, it affects intrinsic motivation negatively. But, the amount of salary gained is critical. When the actors believe that they gain less than average and are not satisfied with the money they gain in reply to their performance, it seems impossible to increase motivation with any other factor. On the contrary, when the actors believe that they earn an average amount of money, there does not seem to be a correlation between the increasing amount of money as rewards and the motivation of individuals. The last dimension of incentives, appreciation, can be evaluated as informational extrinsic motivator which has positive effect on intrinsic motivation of individuals towards the task in design collaborations. It can be widely used to both provide feedback for the team members and make them feel their contribution is visible and necessary for the collaborative work. By this way, employees may feel valuable and be courageous to do their best. Lastly, I would like to note that it was all the designers who expressed incentives as a motivating factor in design collaborations, five of whom were the managers. Only two employees indicated the role of incentives on their motivation in design collaborations, which is confusing for me since I expected to hear more from the effect of incentives on the employees.

On the effect of work environment and conditions, my findings show that the physical environment must be designed to facilitate teamwork and enhance communication by

default in order to support collaborative design. Furthermore, even details in the work environment – such as adjusting the lighting – has an effect on the motivation of individuals during design collaborations. The reason behind this situation is that any place and any equipment can make people feel valued and important which can increase their motivation to keep working efficiently. Beyond this, work environments which enable direct communication between team members are supportive for collaboration. Five out of six interviewees who expressed the effect of the design of the physical environment on their motivation were the designers. Additionally, the number of employees and managers who value the physical environment in terms of both aesthetics and a tool that enhances communication were in half shares.

5.3. Technical Factors

In this section I will present participants' overall approach to the effect of (1) corporate culture, (2) team composition, and (3) process management on their motivation towards the task and collaboration in creative design processes. In the analysis, corporate culture appeared as a theme with two dimensions which are: (1) interdepartmental relations; and (2) career opportunities. Secondly, team composition emerged as a theme with two dimensions which are: (1) competence of the team members; and (2) personality of the team members. Lastly, process management has three dimensions which are (1) design brief; (2) time management; and (3) flow of information.

5.3.1. Corporate culture

In this section, I will explain the effects of (1) interdepartmental relations as a consequence of organizational structure and (2) providing career opportunities in the company on intrinsic motivation of individuals during design collaborations. Interdepartmental relations effects intrinsic motivation mainly towards collaboration because it shapes communication and hierarchical relations. Career opportunities in

the company can be evaluated as an informational extrinsic motivator which motivates individuals towards both the task and collaboration because it offers a higher goal to be reached by doing their best at work.

5.3.1.1. Interdepartmental relations

In light of my interview data, both the managers and the employees stressed that every department should be a stakeholder of the project regardless of any superiority in design collaborations. In order to create collective consciousness, it is vital to break the barriers between departments which are formed by the organizational structure in companies. This idea helps developing sufficient communication and sharing between actors from different departments, as well. Çağatay's following interpretation is parallel with this inference.

[29.85] Sometimes our teammates say that 'but we are the above the production'. No, you're not. Are we below production (department)? No, you not that, either. You are partners with production. You are their supporters. I mean, it's easy when you position this well. Otherwise, if we always struggle you are above me you are below me, there is no end to that.

When any of the departments collaborating is positioned at a higher hierarchical level, that department dominates the process and be more powerful while giving design decisions. This situation causes a lack of motivation since it creates power imbalance between departments. In one of her previous jobs, Burçin experienced such a situation and expresses how this makes her feel as follows:

[23.17] It was affiliated with the design department, R&D, I mean, product development department. What does this mean, so it becomes something like this: It's like whatever the design department wants, the product development has to do. After all, its manager is the design director. I mean, if we have to say in a very simple way. I mean, the person who evaluates is also the person who will get plus points if he does what he says and who will get minus points if he does not. I mean, the design department there was dominating.

On the contrary, she is now working as senior product development engineer in a company where all the departments are positioned at the same hierarchical level which motivates her towards supporting her ideas against other departments. She values the power balance created by the organizational structure to support communication and the contribution of every actor during design collaborations. She says,

[23.18] In other words, the corporate culture surely affects motivation in this sense. So, now I can easily transmit something that I can't do or something that can't be done to the design department. Because I also have a unit that I'm affiliated with, and I'm going through the business of that, too. We can easily conflict, we can fight. So, I do not say to fight in a positive sense, but we can discuss. Everybody can tell their opinion freely. But on the other hand, when it was a very dominant department – if I were connected to the design department - I would have to say yes to everything, and maybe I would be doing things that were none of my business. The loss of time would lead to low motivation. In this sense, the corporate culture is important.

Design collaborations require not only mechanical skills, but also a high level of creative thinking skills. According to my findings, creative individuals are not satisfied with handling routine tasks that do not include creative thinking as I mentioned in Section 4.1.3. They also do not like being part of the tasks that are prescribed in detail. On the contrary, actors prefer having a say in any part of even a well-defined project. This can be a reason why they do not like being managed by the decisions of another department. Canan's account illustrates this:

[22.28] For example, sometimes it happens in product development, products also come with a lot of description, like shorten this, add something here, add a cupboard here, etc. Now the designer doesn't want to do that. It's like an operator. I say, ok, you draw that, there's nothing anyway, you suggest you one, too. It's important for both the vision of this company, because what is described is easy, and it's also important to give them the message 'you are designing'.

Sometimes companies value the contribution of some of the departments, more than the others. As I explained in Section 3.4.1, product design, product development,

product management, marketing, production, purchase and quality departments contribute to collaborative design processes. However, in companies which come to the forefront via design, the design department tends to lead the design decisions in light of my interview data. Banu, who is a brand communication manager in a company that is a leading company in its sector by design, thinks that the design department is dominant as compared to the other departments because the company's focus is at design. She says,

[4.1] The company is a company with a slightly stronger focus on products and design, rather than a marketing focus. (...) You know, the product is very powerful, so product and design management may be allowed to make more decisive decisions in that sense.

When a department leads the design decisions at a point informally in spite of being at the same hierarchical level with others, this situation causes conflict and becomes a demotivating factor for the other contributors. In relation with the aim of the projects, a department can lead design decisions because of the focus of that project. According to Damla, who is transformation and change leader, "*some projects focus on reaching the target sales volume, while another may serve for the recognition of the company by haute couture design work*". This change in the target goal by the product to be designed at the company level may result in a change in power balance between departments. However, when the product managers who decide the overall aim of the product to be designed, do not inform all the departments and actors collaborating in the process about what the product design will serve and the expected change in the power balance between departments in accordance with it, this may result in a loss of motivation as Burçin experienced.

[23.1] In the normal process I have just mentioned, we take into account those from product management, but sometimes for reasons that we do not know, the design department manages this process, for example. Let's say the design department makes a decision about the product. For example, we are experiencing conflicts at that point that it does not comply with our process.

Then we experience serious inter-departmental tensions when these processes are intertwined in each other.

Ayberk is another interviewee who stresses the importance of ensuring power balance between departments that work in collaboration to design a product. He was annoyed by the hierarchical differences between the departments, which according to him are caused by the lack of a democratic attitude in the company.

[33.4] There was no democratic environment there. Because most of the time a hierarchy was felt in the company. ...that felt wrong to me: We are trying to do something scientific here, in fact, engineering, design, marketing, these are all things that progress scientifically. You know, I thought the hierarchy was supposed to be softer.

Here it is vital to be aware of the fact that the contribution of every department and every actor is valuable to reach the utmost goal in design collaborations. This is why participants believe that the departments contributing to the collaborative design processes should be at the same hierarchical level. However, there is a critical point to be considered at this point. Hence products serve for different goals in the companies; there may be imbalance between the efficiency of departments during design collaborations. Meanwhile, it is vital to make the actors know the reasoning of why a department should lead the process than the others. If it is not explained to the actors, the departments may conflict because of the power imbalance created by the managers.

5.3.1.2. Career opportunities

Another factor that affects the motivation of individuals towards the work itself is the opportunity of career improvement. Career improvement is not an issue specific to design collaborations. It is more of a generic issue; however, it is still a factor that affects employees' motivation towards actively contributing to the task at hand.

Serkan, who is a designer working as a design team leader, explains his efforts to learn the details of production in the factory in relation with his career goals.

[13.8] I entered (to production) for the purpose of my future goal: to be able to say it may be this way or that way when this piece is being produced. Three years, four years ago I entered (the production) to learn where do they do it, who is doing it, what is her name and so on. Otherwise, if you do not demand, designer is not allowed in this work (production) anyway.

Based on my analysis, career goals can also be seen as an indicator for continuous progress for the employees. So, it can be evaluated as an informational extrinsic motivator by which the management appreciates the efforts of their employees. It is a way of giving feedback to the employees as a result of their great efforts and contribution to the company. Erman is a manager who values to offer career opportunities for the employees in order to increase their motivation and make them work willingly. He says,

[3.14] Let us have our personal development actions, the human resources department has a roadmap, all of which have corporate actions and plans that relate to the personal development of both departments and individuals. We even went to a meeting yesterday; there they are again developing a new - [14] In the organizational sense - program for more efficient use of internal resources. I mean, if someone develops gradually, works, to a higher level, a work is being done for a better working system for example.

As I stated in Section 5.1.2.3, appreciation has a significant effect on intrinsic motivation of actors towards the task and collaboration in design processes. A way of appreciating the efforts of employees is financial appreciation. It can be via rewards as I explained previously or career development. Berrak values the evaluation of her efforts by the managers in terms of career opportunities as well as rewards. She says,

[32.10] Promotions other than financial motivation... In fact, there is a structure that you see the returns. [32.16] You're there, you're training the ones under you. Always an upper management, your superior nominates you in their place. In fact, there is such a structure. [32.17] In order for me to really be the

group manager, I should have trained a person under me for my place. Because it's a little closed structure.

Canan is a manager who works willingly to reach her goals. She also feels the need to have career opportunities as a result of her efforts. She also mentioned that career improvement is also important to keep working in the same company for long years.

[22.25] As I said, there wasn't a department where you could go up before (...). Designers could only remain as designers within the company, above that, people who go up go to very different units. What happened here now? The fact that I gained a management status here created something, created a roadmap. Positions such as design supervisor and design manager started to form. Of course, creation of a career map was also good for them. And for me, you know, I can say that these career steps made me stay here. (...) [22.26] the company always has an initiative, and I, as a milestone here, that I am being a part of this team - that is, moving to the management team - made me stay. Otherwise, I think that if I stayed in the designer staff, I would probably get away from here.

So, organizational structure can be settled by showing regard to provide career opportunities for the employees. It provides feedback for the employees and a way of appreciation in consequence of their efforts which is also a factor that motivates employees. However, it is crucial to define clearly the conditions for career improvement. If it is related with the efforts and success of the employees, it can be evaluated as an informational extrinsic motivator. On the contrary, if personal relations affect the improvement, its affect may diminish or result is a slight change in the focus of employees from success to personal relations. Nesrin expressed such a situation that her position did not change even though she expected as a result of her achievements.

[21.26] I'm not sure if the promotion is related to performance, frankly, my performance is good but I haven't received any promotion in three years. I think personal relations are underlying a bit. This, as I said at work, I think the private sector is unfortunately desperate or what should I say, that is, that is how it works.

In case employees do not believe that there is equity between what they give to the company and get back in return, it causes a loss of motivation. In order to make individuals perceive that they are being treated fairly, the ratio of their inputs to the outcomes should be equivalent to the other employees (Lee & Puranam, 2017). This attitude complies with Olcay's interpretation on the positive effect of fairness on creating team spirit and motivating actors towards collaboration that I explained in Section 4.2.3.

5.3.2. Team composition

In this section, I will explain in what ways team composition affects motivation of actors during design collaborations. I will evaluate it from two aspects, which are the competence and the personalities of the team members.

5.3.2.1. Competence of the team members

In terms of competencies, it is important to create a team composed of actors with different expertise, who will work on different aspects of design projects individually or as a team. My findings show that, it is critical to have a power balance between the actors. Because during design collaborations, actors from different disciplines or even from the same discipline working on the same project have to defend their ideas towards the other alternatives created by the team members. Additionally, every design solution has to be evaluated from different perspectives in terms of aesthetics, ergonomics, cost, production, user expectations, and sales. So, it is critical to be well-equipped for every team member to create power balance between them, and prevent a decrease in motivation towards the task and collaboration. Olcay's account illustrates this:

[30.10] the fact that the team's being as strong as possible and that the strengths of the staff in the team being close to each other – in terms of motivation – is a preventive treatment without cancer, that is such a thing. If, against, I mean,

a person you believe that is not strong against, it is better to push out, try to leave, to try to separate the paths. You are actually doing a favor for that person because otherwise his motivation decreases and decides to leave himself.

Competition is part of design collaborations where different ideas encounter to be selected the most suitable solution to the given problem. Under these circumstances, power balance between team members becomes valuable in order to prevent loss of motivation caused by being eliminated from among different design solutions recurrently. Bekir's account illustrates this:

[34.8] Five people work on a project and one is selected. ...I think this damages the relationship of trust. Because even it being given to five people shows that the manager does not trust all five of them. Or with a different idea, I know the idea behind it: to be able to say that we worked hard, we worked harder, we created five projects. However, those five were in separate qualities, beautiful projects created and four are wasted. I mean, knowing that your work is going to be wasted, or in the meantime, you can enter an unlucky vicious cycle, that is, if you do very well, maybe even better than other alternatives, that project may not be selected.

Although when the competencies of team members are balanced, evaluation and elimination is part of collaborative design processes (Baumann & Stieglitz, 2014). At this point, it is crucial to consider the contribution of different actors and appreciate it in order to prevent loss of motivation. Unlike Bekir's interpretation, Olcay believes that when the team is composed of actors who are powerful in their expertise, rivalry can turn out to be a motivating factor towards the task.

[30.2] You know, people love competition, we actually use that competition much as a motivating effect. I mean, tell yourself, tell me why you want this like that, and convince me. [30.2] We use persuasion actually. While people use this persuasion, we experience something like this: people who are not good at persuasion are getting eliminated among us; some others train and come in their stead. Because there is a tough competition among everyone. (...) [30.6] I am talking about a place where there is a very harsh competitive environment with very good engineers and very good designers. Everyone is trying to be very good, so they use it as a source of motivation.

When the team is composed of well-equipped and powerful actors from the same discipline working on the same project, still there will be elimination between their ideas. Additionally, it is not a situation to be avoided if there is balance between the competencies of actors. Conversely, it can turn out to be a motivating factor for an actor to convince others that her design solution is the best. However, in case the same actor's idea is being eliminated over and over again by chance, or as a result of different factors affecting the actor's concentration and work, it can be demotivating. For instance – being a designer – Bekir evaluates this situation as a demotivating issue, while Olcay – as a design manager – believes that competition between team members can be a motivating factor. At this point, it is vital to understand team members' evaluation and develop different methods to keep them motivated under these circumstances. Here is how Damla copes with such cases:

[24.36] There is also this fact about the motivation of the team: for example, you give the work to three designers, for example, one of them is chosen. But we always pay attention to this: if the idea of the other is better, I mean the detail of that one is better, we combine two designs and move forward. That's why the jury stuff is so important here. Well, we're not doing that here, so somebody has a very good idea, but if it's not sketched or transmitted properly, the friend whose design is chosen can see how to apply that idea to his own design. Such processes can also happen. Then the idea of those two designers is already progressed together. Jobs that we can mix as such also happen.

By doing this, Damla creates a collaborative environment by combining individual efforts in order to diminish negative effects of competition between team members and motivate actors towards collaborative working. Olcay also uses a method similar to Damla's to prevent the loss of motivation caused by being eliminated a few times recurrently.

[30.9] If there are really good designers within the design team and if one of them constantly makes a difference, it might be a solution to add something to the design of a single winner and include the others to the work. We do this a lot, I mean this is done, done a lot, in fact let me say. His motivation is tried to be protected by including in some things by saying your idea is very good, that

should be here in the form of design, although he doesn't believe a hundred percent.

According to the interview data, actors may evaluate their ideas' elimination or selection during a design decision as a feedback for their performance. During the interview, Serkan mentioned such a process when his design for the body of a construction machine was eliminated, however all his external component design solutions were selected to be further developed and produced.

[13.0] In fact, there was a model here, which was a product of co-operation between Ms. Zehra and Mr. Nuri as the pre-model (because I was new at the time). I – on the other hand – had screen designs, steering wheel, etc. all inner external components were my product. Especially the steering wheel was a very popular product. I changed the screens, for example, those screens are being used in all the vehicles now.

Drawing on Serkan's expressions, it seems like competition between team members should not result with the selection of the same actor's ideas in order to prevent loss of motivation. Even when his idea was not selected for the main component of the machine, he stressed a few times that the external components belong to him. He expressed that his ideas were appreciated so much that still they are being used in different machines. So, no matter how powerful an actor is, recursive elimination may result in loss of motivation. In order to prevent this, small wins like designing a component in the product may help.

While composing a team for design collaborations, it is not enough to have talented experts. In addition to this, the vision of team members and team leaders should match on being open-minded for the efficient conduct of the process. Based on his experiences, Çağatay explained that he has to create a new team in the company by replacing some prior workers with the less experienced ones whose attitudes towards product design is line with him. He says,

[29.3] In the new things, the thing I usually disliked is 'these cannot be done here' and similar shallow thoughts that could not go beyond themselves, I had to get rid of, I didn't have a choice. We injected new engineers into the team. We've had the old ones change departments. We had to separate our ways with one of them. There is nothing to do. We had to rebuild such a team from the ground up. [29.33] My work was very difficult if I hadn't changed this team. That's why I had to change the team. I mean, they saw that they could not adapt, they could not live in the team. That's why the team was changed.

So, while creating team for design collaborations, managers should consider the competence of candidates, and their being open-minded. In addition to this, team members also evaluate the competence of their managers in terms of both managerial and technical skills. Burçin stresses managers' skills and knowledge as an important factor that affects team members' motivation. She says,

[23.16] that person (project manager) leading the project, knowing the industry he works in, at least knowing the material makes all the difference. I mean, when I say chipboard - if we are talking about furniture - there is a difference between the fact that she understands when I say chipboard and she says 'what is chipboard'. Because, I mean when she tells me 'what is chipboard', you start with anxiety that 'she doesn't even know what chipboard is, but we're going to run a project with this person'. Because I understand that we will be stuck at many points in the process and I will be storing information on him. I'll both be doing my job, and I'll be constantly announcing, like - because these things don't happen by sitting for five minutes - sometimes I'll have to send a sample of material to tell something that she doesn't know, like taking photos and send. I'll have to tell the production detail of the difference between them. Like this, that is a waste of time for me - it's not a problem if I consider it a personal sharing - but when this starts to occupy a large part in the whole process, like in the project such as this becomes something other than which I could only give all my energy in the project. On the one hand, you have become someone who starts feeding the other person. So, it's important. When you work with someone who is experienced, you really go a little faster.

So, managers' abilities to conduct the process effectively are not enough for high performance of team members. Their mastery on the knowledge on every aspect of design process affects the motivation and performance of team members', as well. In addition to this, personalities have an effect on individual motivation in collaborative

design processes, which is the second aspect of team composition I would like to explain.

5.3.2.2. Personalities of the team members

Intrinsic motivation is interrelated with personality, since the sense of joy and challenge at work triggers some people more than the others due to their own personality (Amabile et al., 1994). In addition to Amabile's claims, my findings revealed that the characteristics of team members have an effect on the other members' motivation towards collaboration. In a previous quote from Olcay on the effect of challenging work on intrinsic motivation, I explained how a small group of people – compared to the volume of the design work to be completed – accomplished that work with high intrinsic motivation. Later in that interview, Olcay explained in detail that another dimension that has an explicit effect on accomplishing that design work was the compatibility of the characters of the team members. He explained the situation as follows:

[30.35] our team was like: there was me, a very result-oriented character - I'm talking about me personally; there was a lead designer who had little to make compromises, I mean he didn't like to make compromises; so there was a friend who was drawing this work. And technically, a perfectionist, not an engineer, but someone, a friend who was working on the technical side, physical model, something I call white collar. Here, I made the person who didn't like to make compromises compromise for many times with my result-oriented side; the person who was a perfectionist technically and this person who didn't like to make compromises have taken action to create a perfect model; of course, I was constantly showing how congested we are on time and took five-ten design decisions a day and pulled to some place. We pulled each other as such, then they also pulled me, they pulled me to that so they also pulled me to places where I should not make compromises and I did not compromise in those points. Therefore, the competency of the team in this job - actually in any job - being suitable is something like this, actually. (...) [30.36] If the whole team was made up of uncompromising persons, this job could not have been finished on time. If the team consisted of all result-oriented people, this job would not have been of such quality. Therefore, when establishing a team, it is necessary

to establish a team in such a way as to balance these sides of people. Otherwise, unfortunately you can be left out in the cold.

Drawing on Olcay's experiences, it seems that being aware of different characters of actors helps composing a compatible team in which actors support each other in accordance with their characteristics. It is not only the competencies, but also characteristics that affect the performance and attitude of actors towards the task at hand. So, in terms of contributing roles in collaborative design processes, the actors' contribution should be evaluated in relation with their characteristics, as well as their expertise. Moreover, characteristics of the managers have influence on design decisions. As Olcay experienced:

[30.17] If the manager who directs your team or that project is a very accepting person, you may not get anything you want. If he's too aggressive, you might not get anything you want. I mean, every project has a thing, a way. In fact, the characters of the people who work in that project and who are assigned to that project determine what the department can and cannot take. We are talking about such a variable situation.

According to my analysis, in search for motivating people intrinsically, it is important to be aware of their personalities to be able to find out different motivating factors for different personalities.

5.3.3. Process management

Collaborative design is a process that is *learned* and *experienced* in companies. The belief and trust towards the knowledge and experience on how to conduct this process in the company is a factor that affects team members' motivation. In light of my interview data, it is related with trust deriving from knowing what to do and how to do it. Below I quote a designer manager, Damla; and a designer, Nesrin, to illustrate their explanation about why having knowledge on how to conduct collaborative design process is valuable for them.

[24.22] Damla: Since I am currently working in a more corporate company, it has a corporate culture more. Because, previously worked with professional design companies, there is a corporate culture here about how design should proceed. ... here you are given time to do product designs by going through more market research. You know, since we have more corporate culture about how to direct the design work, and we have worked before, we are working more freely here in the design phase. (...) As this process has been learned, in fact, the design process is on track. Let me say so.

[21.11] Nesrin: There is a design department, a product management, somehow, I am being tried to be worked for the right thing by making the right decision. I mean, they don't come to me like this: design something and develop it at the same time, there is no such thing as produce it at the same time. In other words, we set out by believing that the designer should design. And I'm actually trying to turn a value-added product into real life. And of course, you feel safer this way. You feel like you're moving forward by knowing what you're doing. So, you're not doing it to an unknown, in that sense, of course it's important, so it affects me personally.

The interview data shows that, in case the steps towards conducting an efficient collaborative design process is well-defined and responsibilities are distributed clearly, actors contributing to the process can focus on their responsibilities and feel assure. In this context, process management in collaborative design is a multi-dimensional process that every aspect has to be analyzed and clearly defined in order to make the team members concentrate on their task and work efficiently. In the analysis, process management appeared as a theme with three dimensions which are: (1) design brief; (2) time management; and (3) flow of information. In the following sections, I will explain how these factors affect intrinsic motivation of actors towards the task and collaboration.

5.3.3.1. Design brief

The starting point of design processes is the design brief (Collier, 2012). Writing the brief was the responsibility of product management or marketing departments in the companies that the interviewees worked for. Both the managers and the designers stressed the effect of well-defined design briefs on the efficient conduct of the

processes and their motivation. Among non-designer participants, there was no interviewee who expressed any opinion regarding the design brief. However, designers and design managers working in different sectors commonly emphasized how important the brief is for making design decisions, time management, communication between departments and individual motivation.

Burçin is one of the designers who experienced the importance of a well-defined brief and holding to it for understanding what is needed clearly and being able to create it. She says,

[23.8] I mean, the content of brief is already very important in the process. We had a lot of discussions about the brief in the design departments I have worked before, (...) in the design departments I have worked before. As I mentioned, the clearer the brief, the more effective it is in shaping the design. In other words, the missing point they have left while preparing a brief definitely comes out as missing in the design concept. Likewise, the brief may be correct, but if the design department proceeds on its own, problems arise when it becomes independent of that brief. As I said, the starting point of the brief is very important. Everyone understanding everything correctly.

Like Burçin, Damla also believes that creating the right product that the company needs in its product catalogue is interrelated with the frame defined in the brief.

[24.5] when we actually design the product, when we design according to the brief explaining the source material, price range, etc., we reach clearer, more accurate designs.

In search for a detailed brief, she does not limit herself with the brief prepared by the marketing department that includes the analysis of the market and the specifications of the product to be designed. With her team, she searches for other dimensions that affect the design such as how the target product will be placed in the existing product family. She says,

[24.1] In the construction stage of the project, briefs first come to use from marketing; sales and marketing. You know, briefs about what kind of product they need, market analysis, what kind of product our customer should have in their eyes are coming. But we're not content with these. We also do our own research. Research about what, for example? Research on the dominant vehicle in the market, research on the market-leading vehicle, after which you will design a product, but research on how well this product fits your product family, and in the first analysis we collect the related processes.

The interview data reveal that although design brief is a critical beginning of conducting an efficient collaborative design process, it is sometimes being neglected because of time constraints. Gamze's account illustrates this:

[6.12] Sometimes these demands come to us as immature, because the sales team has a pressure on marketing, marketing has on the product, the product on the design, the design on the P&D. Therefore, if we spend more time on the demand side of this, we will not actually have these tides. Why, for example, something comes to me, some kind of flower pattern is needed in the portfolio, the sales team tells us that customers want this, this comes to us on the grapevine, but in fact when do the job and submit to the sales team, they say, if only there wasn't a flower. But on the other hand, when you ask to the person transferring this to you, he says, there was time pressure and they wanted it urgently, so I gave it urgently. But on the one hand, it's a waste of time to start over. [6.12] However, if we spend a little more time in creating that demand and the demand becomes clearer to me, I will do more accurate work. In fact, time will shorten. The time spent at them at first actually comes with something like we're staying late but in fact overall it seems to have spent more time as long as you look at it.

Design process is iterative by its nature, since returning to early thoughts is needed to reconsider the actions and decisions (Leblanc, 2012). However, iterations caused by ill-defined design briefs decrease the motivation of actors and cause conflict between actors while making design decisions. When the information is missing in the design brief, designers make their own interpretations during creative idea generation. But not all the interpretations serve for the target goal, and instead cause iterations and waste of time.

[31.16] If the designer is to build a vehicle, at least the distance between the wheels is one of the very basic rules – whether it should have this information or the purpose for which the vehicle is to be used – she must have clear information about marketing so that she can start. For example, let's say there are times when this marketing information is not available. When some information is missing, the designer is working on her own presumably. Then she tries again from the beginning when something wrong happens. I mean, this can happen: Missing design information or changing information somewhere in the design process. This is usually due to a mistake. The customer needs not being clearly determined in the first-place causes this. [31.17] Sometimes a person may not know that he is making a mistake at that moment. She may not know that data is missing there. For example, marketing may not know that information coming from them is missing. They may have noticed new information on the way. I mean, if you do not analyze some things well in the first place, then things can change.

Drawing on the interview data, it is important to be aware that the contribution of every department and actor is valuable without any distinction or regardless of how much effort was spent. Although all the interviewees tend to talk more on the contribution of designers and engineers on collaborative design processes, and their contribution is more visible, my findings show that the design brief is an ignored factor affecting the whole process and the team members' motivation. So, it is vital to concentrate on and allocate enough time to create the brief at the beginning of the collaborative design process for the effective conduct and reaching target goals. Being aware of this notion, Canan explained why she spent effort to prepare brief forms and make this a habit in the company to fill out those forms as follows:

[22.7] Here is how you want in the first place, which segment will appeal to, more consciously, I like a lot of these brief forms - there were before, too, but such a thing, we did not have any forms - we used them and made signed. Look, you want something, we design products according to that, let's do according to that. What happened to them (marketing department), we said fill the reason. Now let's design a product, but there is no reason. It's not clear what is wanted. We encouraged them to think, and we brought the issue to let us design according to what you think. In this way, since the communication was stronger, the projects started to be healthier until the end.

When a design project starts despite the uncertainties, it may result in overrunning the time and budget, conflict between departments, and consequently decrease in motivation towards the task and collaboration. Burçin experienced such a case and expresses the importance of well-defined brief on efficient conduct of the process as follows:

[23.6] The project started both late and with a lot of uncertainty and because of the fact that no one was actually happy with it but again due to working with a 'very famous designer', it was said that we were going to make these designs, and that the project started with problems, about an ego that we didn't know about, prestige and communication. Despite all the uncertainties, we made five prototypes if nothing and still could not reach anything, for example. Because the number of prototypes was high, the number of materials was high, it was a very uncertain project, that never settled. When this is the case, the projects take a long time, the communication is really difficult, the interdepartmental discussions are too much. So, as I said, over something that doesn't fit, for example, you ask a question, and the other person doesn't know the answer to it, so he makes an assessment, time loss and pressure. I mean there's a certain time, you can use that time by working for nine months and idling for three months or working two months and idling for nine months. Therefore, we experience problems. [23.7] All projects that are uncertain were prolonged. The points which everyone said as all right, everything is meaningful, as I said, not only in the sense of design, but that design is fit for that cost, where the marketer can market it, that product is always, both successful in the end and the process is also successful.

In sum, product design process is not a linear but an iterative process by its nature. Accepting this notion, it is still important to be careful about the number of iterations during the process because of time constraints in design practice. Deriving from the interviews, I realized the effect of design brief on the number of iterations made during the design process. So, in search for following the time schedule of the projects strictly, it is vital to spend more time on writing the design brief, which can seem to be a waste of time at first sight. As opposed to the prevalent judgment that spending less time on design brief will result in gaining time for the rest of the process, a detailed design brief that has been prepared carefully and in detail even in a longer time may result in less iterations. Iterations caused by ill-defined design briefs decrease the

motivation of actors. Moreover, a carefully written design brief can be used as a guide while taking design decisions. It is important to have such a guide because actors compete for their ideas to be selected from the other alternatives and the brief provides the reasoning of selecting that idea. By this way, a well-prepared design brief may prevent conflict between actors while making design decisions which may have a detrimental effect on motivation.

5.3.3.2. Time management

In design collaborations, catching up the time plans is a strictly followed theme. Actually, strict time limitation is a reason behind collaborating in design processes as a result of short release time to compete in the market (Kleinsmann, et al., 2007; Hoegl, et al., 2004; Valkenburg, 2000). In the below quote, Damla explains the importance of catching up the intended timing of the process.

[24.12] It is hard to follow the schedule. In our case, not making that schedule means that the product does not enter the market in time. The fact that the product does not enter the market on time also creates a huge problem during the sales period. In other words, if you do not release the product for sale during the period of sale, then you miss that 3-month 6-month period on average, directly, automatically. Therefore, there are certain months in which the market makes purchases, in those months that product must be presented to the market. When you miss it, it's postponed to next year. That is pretty hard for us.

When there is a strict deadline about the end of the process, it becomes important to schedule the process carefully, since phases of the design process is interdependent. As I stated in the previous section, the contribution of every department should be appreciated and given enough time and space to do their best in the limited time. While explaining the reasons behind the successful conduct of a collaborative design process, Selma, who is a product manager, stressed the positive effect of scheduling the process considering the time needed for every phase and department.

[5.3] In that collection, there is indeed a room for the design manager to design; there is room for product management to place it in its portfolio and for accurate assessment; where she really wants to position it with the sale, where she can play between the dealers or projects in the market, where she can evaluate them; P&D, or rather R&D, a space for innovation, a space to show something new, to present something new.

It is also important to have knowledge on the approximate time needed for a specific design work for the managers, since it effects the planning of the process and the following phases. Canan says,

[22.3] If it is a module project, we say that we can do it in ten days. If it is a medium-hard project, for thirty days, if there is a lot of modules, for example, there are lots of plastic pieces, we will finish it in like sixty days and set a process like that. And it settles on a general schedule, when and how long this project takes, after we determine the process as design, we pass it to our P&D department, which makes the prototype processes, inputs to its own sections.

Despite the knowledge on the approximate time needed to complete a task, there may be different reasons that prevent catching up the deadline. According to my findings, the work load of every department is a crucial factor that has to be considered while scheduling the process. In order to catch up the deadline, it is vital to schedule the process considering the workloads of the departments. Banu's account illustrates this:

[4.8] We often find it difficult to catch deadlines. This, the product may not come out of the factory at the specified time, because too many extra things can occur. Or you give a design brief to a third party, they try the deadline fifth. You give and it comes back. You give a revision; it goes and returns on the 13th. This in turn prolapses the work that I will print or distribute on the 5th automatically, I mean generally. (...) I think we have a problem with timing.

Another factor that affects catching up the deadline during design collaborations may be the long periods needed to finish a complex project. In this case, it is vital to monitor the progress and understand if all the departments and actors can catch up the estimated time. Oktay explains that they use checkpoints in long-term projects to

observe the progress and understand what is required if there is a problem about the timing and progress.

[31.4] In large projects, the process can be very long. For example, it can cover a period of 5-6 years. (...) At the end of the process, we put things in the intermediate sections, as it is certain what we will deliver; sometimes we put checkpoints in between. So, how are we doing? Will we bring the thing we will deliver, if it is data, to this point? How are we doing? We arrange meetings to bring everyone in line and deliver. What information deficiencies are there? You know, sometimes this is done with weekly meetings. Sometimes, if it is a 3-month process, every 15-days, one-month meetings can be made. Thus, a healthier process management can be ensured by ensuring that everyone is on the same line.

Using checkpoints during long term projects not only affect catching up the schedule, but also make team members observe their continuous progress as I explained in Section 4.1.2. It is vital to correspond with the estimated time plans during design collaborations, since a delay in any phase affect the following phases and reflects to the end product. In terms of strict time limitation's effect on intrinsic motivation, it may cause stress on the collaborators. Actually, sufficient amount of stress is identified to increase creative thinking skills; whereas increasing amount of stress may block creativity (Ren & Zhang, 2015). Moreover, when there is a loss of time caused by a department, it causes conflict with the other departments which are being affected from it. Nesrin experienced such a case and explained as follows:

[21.21] remember I said that the product management is the owner of the product. Yes, they are. But let's say that the project that was supposed to come on that date, we are pressuring them by asking why didn't it come? Because, you know, yes, they own it, but ultimately, it is them and us who are going to be subject to time constraints. Therefore, of course, we do some pressure. See, tensions can happen between people during these pressures, I mean, how can I say, these are as such, not high tensioned things, of course. If you don't really have a problem individually, you don't have a problem with yourself, or if you don't have that problem, it is not very high.

From another aspect, strict commitment to the time limitations may turn out to make actors result-oriented. As a result, focusing mainly on finishing the project at a given time may change the focus from searching for the right decision to the easiest solution possible. As Damla experienced, for curious actors searching for the best solution in given time, this attitude may cause decrease in motivation.

[24.11] if there is a lot of pressure about a project to complete it, if there is some kind of pressure to complete it in anyway, and then we can do it again, repeat it, in a sloppy way. You know, this is not, if the director has an attitude in the direction of finding the right, then better, smoother, I mean almost in the same process, works are completed. Not in a way that no matter how, let it be completed, let us comply with our time periods. But more like let's find the right, let's do the right thing in one try. If it progresses as such, then a more accurate product is made.

As I mentioned in Section 4.1.2, time planning is related with motivation since reaching the goals in estimated time is a factor that makes actors feel pleasure and keep demanding the same feeling which serves for continuous progress. This aspect of time management is related with intrinsic motivation towards the task at hand. On motivation towards collaboration, time management affects individuals' and the team motivation since phases of the design process are interdependent. When a department could not catch up the estimated time in any phase, it affects the performance and efficiency of the other actors in the team. This situation may result in conflict between departments or actors. So, catching up the schedule in estimated time seems to prevent a decrease in motivation towards collaboration.

5.3.3.3. Flow of information

During design collaborations, continuous flow of information is vital for an efficient conduct of the process in order to keep developing the project in the light of current information. Because of the iterative nature of design process there may always be change in the data essential to develop the design. According to my analysis, providing

suitable conditions to ensure flow of information enhances communication between team members. It also prevents conflict between team members that may arise as a result of not transferring the updated data in the process. Oktay explains that actors collaborating in design processes need input from another to do their obligations.

[31.15] Since everyone is doing business depending on each other, for example, let me tell you: Imagine doing 3-D modeling, input is required for 3-D modeling to be made. So, it has to be clear - or partially clear - what you're going to do, so you can improve it.

As I explained in Section 5.2.3.1, uncertainties caused by the missing information in the design brief may turn out to be a demotivating factor. Likewise, interruption in the flow of information has a demotivating effect on actors because it prevents them from doing their obligations. Burçin's account illustrates this:

[23.10] You may really be a business-oriented person, but ultimately you have feelings. If there's a project that you really love ...but this love thing is a bit like I said: it's about everything being clear. I mean, it doesn't go by itself like 'oh, this is a very nice concept' and such. One that you like much, in form you may also like but, if it has uncertainties, if there is no flow of information to you, then you start becoming unhappy and unwilling to do it.

My findings revealed that flow of information should be triggered by the managers. They also have a role to monitor if information can pass through the necessary departments in time. Because if the data is missing, it causes loss of time and motivation. Damla stressed the role of the manager in providing flow of information starting from herself as follows:

[24.21] If the project manager is able to directly transfer the information without keeping to herself, if she can provide the internal coordination properly, the project can proceed in a healthier way. (...) I mean, for example, the mechanical team needs the data, but if the body team doesn't know about it, it can take a little longer. You know, the smoother the coordination between the teams, the faster the project proceeds.

Coordination between departments helps sharing current information on time to keep working coherently. However, there is a precondition to share the right information with other collaborator which is to be sure that the data developed is the required one. Oktay experienced such a case where the shared data has missing information. He says,

[31.2] It is important for the designer to prove herself very well in the first place, that is, to solve the ideas in her mind. Because if she doesn't solve it well, and leaves it to the next stage - for example, leaves it to a 3-D modeler - then the 3-D modeler creates something on it and I mean the designer tries to manage it somehow, tries to form his idea somehow but never could be as effective as in the first step. There, the influence of someone else is more effective and so the workflow there is getting a little worse. If she can handle it in the first step, when it is usually solved well there, problems with the design, the next steps, solution is obtained so much faster.

Sharing the data with other team members for further development although it is missing may be a result of time limitations. As I stated in the previous section, result-oriented people may seek for catching up the timing mainly, instead of searching for the right solution. As a result of this attitude, there may be missing information in the shared data which causes iterations and loss of time.

From another aspect, flow of information may be interrupted as a result of lack of coordination or not being aware of the importance of updated data for the development of the product. Damla believes that one of the problems in terms of continuous flow of information is a result of disregarding the importance of sharing the existing data on time. She says,

[24.2] Either we shouldn't keep information, because if the teams work very separately from each other, there may be information disconnections. For example, the data given to me is old data – this was one of the problems we encountered in the beginning, now we are solving this over time –when the data given to me was old data – they changed the data while I was working on the old data – and my model didn't fit to that body. The reason was all about the fact that the data I received was wrong data. You know, because teams

work in coordination, we usually download parts through a system, but if the last data needs to be put into the system, you know, there were some problems about getting the latest data. Now we are over these issues. We got over them like, I'm not taking from the system. I ask from the person working directly, who is responsible, and he delivers the data to me.

In the case of Damla, although there is an online system that the updated data can be uploaded from which all the other actors can reach current information, it did not work well. It seems like people value completing their own tasks more than sharing the piece of data they created that serve the overall goal; the product to be designed. Under these circumstances, collaboration motivation and team spirit become valuable. Damla's solution to this existing problem was to enhance communication between departments and actors.

[24.16] The engineer thinks that air should be discharged from there, she opens that space herself, for example makes a grid there, but doesn't inform you, you see it on the vehicle later. But we now manage this process as follows: she tells me that there is a culvert to open here, I work on the visualizations, then we go over the minimum and the maximum, like how maximum air discharge can be made over the visualizations, or how the air infeed can be made, and we do the work accordingly.

The problem of not sharing data with other team members may be evaluated as a lack of collective consciousness. If actors are aware of their role in the team and feel the importance of working as a team collaboratively, then they may serve the flow of information and care about sharing the data on time. Since any design decision may affect other parts of the product and the work of other departments, it is vital to work collaboratively and share current information with the other actors. To ensure this, Canan values coming together with all the team members every day to talk about any problem about work.

[22.1] We hold meetings for 15 minutes in the morning, all departments - the meetings of directors and GMEs start firstly on General Manager basis - here, distributed from work flows, then teams. I do it with my own team, I do it separately with design. In these meetings held every day for 15 minutes, our

problems, questions to each other, these are discussed and for example, the external units also participate in these meetings. For example, P&D director can participate in these meetings every day and talk about our problems. In addition, the designers make their own meetings one to one, they send e-mails, like if we have problems, issues, you know I can say that there is a continuous circulation about these.

The interview data shows that sharing information on time with the team members is a critical point in design collaborations since the performance of actors is interdependent. There are online tools that companies benefit to obtain continuous flow of information. However, it is not adequate. As experienced by interviewees, the documented design processes differ from their experiences and following a strict method does not guarantee the flow of information. People sometimes retard the flow of information for some reasons. Here, the team spirit may serve the flow of information by creating an awareness that all the actors and departments are a part of a team to create a whole collectively. Thereby, intrinsic motivation of actors to be a part of a team creating a product design can help the flow of information, as well.

5.3.4. Discussion

Deriving from the interview data, it is obvious that intrinsic motivation of individuals in design collaborations is interrelated with corporate culture in accordance with its effect on interdepartmental relations and providing career opportunities. Interdepartmental relations affect the design decisions by the power balance which is formally created by organizational structure; but, may change informally during the collaborative design process. Five interviewees, two of whom are employees, stated that interdepartmental relations affect their motivation mainly towards collaboration since it provides power-balance between contributors. The hierarchical differences between departments contributing to collaborative design processes can be demotivating for the actors working in departments which are at lower hierarchical levels. This is because they do not feel that they have a legitimate say in the process and the decisions will be led by actors working in a department which is at a higher

hierarchical level and also have a control over the process and performance of actors. So, it is vital to realize that even the single person is affected by interdepartmental relations because it is related with power balance, communication and freedom to express and support ideas. Creating power-balance between departments contributing to collaborative design processes cannot be evaluated as a motivating factor; however, the lack of power-balance may have a detrimental effect on motivation.

In terms of career opportunities, it can be evaluated as a financial appreciation mechanism which provides feedback to the employees for their efforts. However, four out of five interviewees who expressed that they tend to work willingly when they have the opportunity of career improvement were the managers. Drawing on this data, it can be said that having a chance of career improvement motivated employees that make them gain managerial status. In case the conditions are defined clearly, career improvement can be used as an informational extrinsic motivation that also supports intrinsic motivation towards the task and collaboration. It is related with task motivation since actors' performance is being monitored and evaluated individually. Additionally, it is related with collaboration motivation since career improvement means leading or managing people who deserves working as a team.

Deriving from the interview data, it is obvious that the competence of creative members from either the same or diverse disciplines must be close to each other to obtain power balance and trust. Six interviewees expressed the positive effect of the balance in the competencies of actors, only one of whom is an engineer. Having a balance in the competencies of team members also serves for creating team spirit. While taking design decisions, actors compete for their ideas to be selected from the other alternatives. When the competencies of actors are not close to each other, it may result in recurrent elimination of an actor's ideas which may cause loss of motivation. Under these circumstances, managers follow two different ways to tackle with the problem. The first one is to combine different design solutions offered by the actors at one product. Second one is to evaluate and benefit from the ideas of different actors

in other suitable products. Like interdepartmental relations, team composition can be evaluated as a factor that prevents the loss of motivation as a result of the balance created between the competencies of actors. Only when the actors' competencies are close to each other, competition between team members can turn out to be a motivating factor, because they will compete to be the best of the best. Additionally, managers' competencies in terms of managerial and technical skills affect team motivation. When team members trust their managers' competencies, it turns out to be a motivating factor, as well.

In terms of the effect of personality on intrinsic motivation, some people tend to be highly intrinsically motivated since they are driven more by joy and challenge at work (Amabile et al., 1994). However, my inferences contribute to this finding by revealing the effect of different personalities on creating a compatible team supporting each other. Considering this, it is vital to have as much as different tools to motivate people in line with their characters.

Process management has an effect on intrinsic motivation towards task and collaboration from different aspects. In literature design problems are stated to be ill-defined (Cross, 2000). However, design briefs which serve as a guideline to the process should be well-defined in order to guide the process. According to my analysis, five interviewees all of whom were designers stated that when there is a lack of information in the brief or there are changes in the brief during the process, this may result in unexpected iterations, loss of time and conflict between team members as a result of uncertainties. When the process is stuck at a point because of the lacking information in the brief, it turns out to be a demotivating factor towards both the task and collaboration. To prevent this, enough time should be given to the departments preparing the design brief, in the beginning of the process.

Since there are time limitations which are strict to obey and every phase of the design process is interdependent, managing time carefully is an important issue in design

collaborations. One employee and five managers stressed the importance of time management in design collaborations, four of whom were designers. Completing a task in given time can be evaluated as reaching the goals which make actors feel pleasure. In order to achieve the goals in given time, it is important to know the approximate time needed to complete the given task and make the time plans based on it. However, being result-oriented may cause focusing too much on completing a given task on time without searching for the best solution.

In case there is not enough time, but the task has to be finished in a shorter period, high intrinsic motivation should serve reaching the goal. Time management also has an effect on motivation towards collaboration since any delay at a phase reflects on the following phases and the performance of other actors. This is why actors sometimes monitor their team members' performance to prevent their probable negative effects on their work and performance. It seems catching up the schedule prevents a decrease in motivation towards collaboration.

Lastly, flow of information is a crucial factor that has to be managed well in order to conduct an efficient collaborative design process. Four interviewees all of whom were designers stated that lack of continuous flow of current information may result in lack of motivation because every step of collaborative design process is interdependent. When the information does not pass through all the departments contributing as a result of a problem in communication or management, it results in iterations, loss of time and motivation. In order to prevent this, online tools and scheduled meetings help being aware of each other's development and the current situation of the process. The themes in this chapter can be seen subsidiary factors affecting motivation towards the task and collaboration. Emotional factors that I explained in Chapter 4 mainly serve for increasing intrinsic motivation in design collaborations. However, rational factors can be seen as supporting emotional factors by conserving the motivation created.

CHAPTER 6

DISCUSSION

6.1. Overview of the Study

The aim of this study was to investigate how actors can be motivated towards the task and collaboration in collaborative design processes. Existing research on collaborative design processes investigates the issue from technical, social, and cognitive perspectives. However, the motivational aspects of design collaborations have not been investigated, although there are studies on the effect of motivation on individual creativity.

Research on creativity dating up to the 1960s deals with explaining the attitudes, approaches, and cognitive skills of creative individuals, since creativity was accepted to be *'given'*. They mostly assess creativity as special qualities of unusual people – the geniuses – who possess a unique talent and personality that must be identified and appreciated (Amabile & Pillemer, 2012). This perspective overlaps with the attitude towards designers in the 1990s, assessing designers as lonely geniuses who have the ability to create anything alone, just with their ideals and visions in their minds. However, subsequent research on creativity offered a new perspective that evaluates creativity as a skill that can be taught, learned, practiced, and improved (Parnes, 1967; Osborn 1963; Kruglanski et al., 1971; Lepper et al., 1973; Simonton 1975; Amabile 1983). Intrigued by this attitude, Amabile (1997) announced the componential theory of individual creativity, which set forth the connections between creative thinking skills, expertise, and task motivation that affects individual creativity. In a similar way, there was a change in the status of the designer from being the *'lonely genius'* to *'an actor'* collaborating with experts from different disciplines (Richardson, 1993; Hoegl et al., 2004; Kleinsmann et al., 2007; Valkenburg, 2000).

Based on the developments in our understanding of creativity and the status of the designer, it becomes notable to search for the effects of motivation on individual and team creativity in design collaborations in order to better understand, practice, and learn how to conduct effective creative design collaboration.

Among the three components of individual creativity, which are creative thinking skills, expertise, and task motivation, motivation seems to be the one which should be managed and developed for the actors collaborating in design practice. Considering that the expertise and creative thinking skills of employees have already been measured and confirmed by the companies they are working for; it is the motivation factor that companies should benefit from in order to enhance creativity in design collaborations.

Motivation has two distinct dimensions, which are intrinsic and extrinsic motivation. Research on extrinsic motivation mostly stresses its diminishing effects on creativity, intrinsic motivation, and self-directed nature of employees (Pfeffer, 1998; Woodman et al., 1993; Amabile, 1997; Deci, 1995; Ryan et al., 1983). There are also studies suggesting that extrinsic motivators may enhance creativity when applied in an autonomy-supportive climate (Gagne & Deci, 2005) and when they are deemed as informational rather than controlling (Amabile, 1997). It is intrinsic motivation that proves to affect creativity and performance positively, since it provokes the actors to work on a task for the sake of joy, delight, and success. So, it will help to find ways to enhance the intrinsic motivation of actors in design collaborations in order to increase creativity and performance in practice.

In this research, I focused mainly on the factors affecting the intrinsic motivation of actors from diverse disciplines in design collaborations. However, there were also extrinsic motivators in the analysis, since they have a positive effect on intrinsic motivation of actors under certain circumstances. Additionally, I evaluated factors affecting the motivation of actors from two dimensions, which are factors affecting

intrinsic motivation towards (1) '*the task*' and (2) '*collaboration*'. Task related factors trigger the motivation of actors primarily towards doing a creative work, accomplishing a task individually and succeeding in it by searching for the best result; whereas collaboration related factors trigger motivation of actors primarily towards being an active participant of a team who seek for the best output created with intense contribution of actors from diverse fields.

Accordingly, this thesis provides a motivational approach to collaborative design research and practice adding on the technical, social, and cognitive aspects. The main contributions of this thesis are:

- presenting the motivational aspects of design collaborations and providing methods and strategies to enhance the intrinsic motivation of actors towards the task at hand and collaboration
- assessing collaborative design process from a broad perspective by going beyond the designer-engineer duality and including experts from product design, product development, product management, marketing, production, purchasing, and quality departments
- developing a model for the creative design process based on the motivation of actors drawing on its relation with the creative learning process
- exposing the importance of a clearly defined design brief on the effective management of collaborative design process by enhancing motivation, eliminating conflict, and preventing unnecessary iterations.

6.2. Prominent Implications

In the following sections, I will discuss the contributions of this thesis that I compile above in detail in relation with the current literature.

6.2.1. Presenting the motivational approach to design collaborations

In search for an understanding of factors affecting motivation of actors towards task and collaboration, I analyzed the data from two different perspectives which mainly seek for the *'emotional'* and *'rational'* factors. Since I explained the process that shapes the template in Section 3.5, I will discuss those factors regarding their effects on the motivation mainly towards (1) the task, (2) collaboration, and (3) the factors in between. Actually, it is not possible to draw clear distinctions between these factors in terms of their effect on task motivation and collaboration motivation.

Since this thesis focuses on collaborative design experiences that actors have to work with others to some extent in order to create a product, task motivation may turn into collaboration motivation in order to fulfill the task. Even if a factor seems to be related with only task motivation such as *'believing in the task'*, it calls for collaboration motivation, as creating that complex product is a matter of collaboration. The single actor cannot succeed in designing the whole truck, for instance, and has to collaborate with others to develop and produce the project that she believes in.

Likewise, factors that seem to be affecting collaboration motivation at first sight, such as the competencies of team members, may also affect task motivation. Most of the interviewees stressed that since the performance of individuals and successful conduct of the process is interdependent with the performance of all the actors involved, trusting the competency of other participants is of great importance. From this point, the balance between the competencies of actors seems to be related with collaboration. However, it is also vital to trust the expertise and competence of other team members in order to believe that they can tackle the problems related with their expertise. This may help to concentrate on personal obligations, leaving the rest to the other experts. Additionally, when there is power symmetry in terms of competencies of team members, rivalry can turn out to be a motivating factor that leads the actors to focus more on their tasks to increase their performance to compete for their ideas.

There are also factors that have an effect on both task motivation and collaboration motivation from different aspects. Work environment is one of those factors. The physical organization of the workspace that facilitates teamwork and enhances communication between team members may increase intrinsic motivation towards collaboration by calling for direct communication and coming together. Moreover, having a separate workspace or a nicely designed office fosters intrinsic motivation towards the task at hand, since it creates a feeling of belonging and privacy that provides a deeper concentration on the task. In brief, some factors affect both task motivation and collaboration motivation. So, they should be positioned somewhere in between.

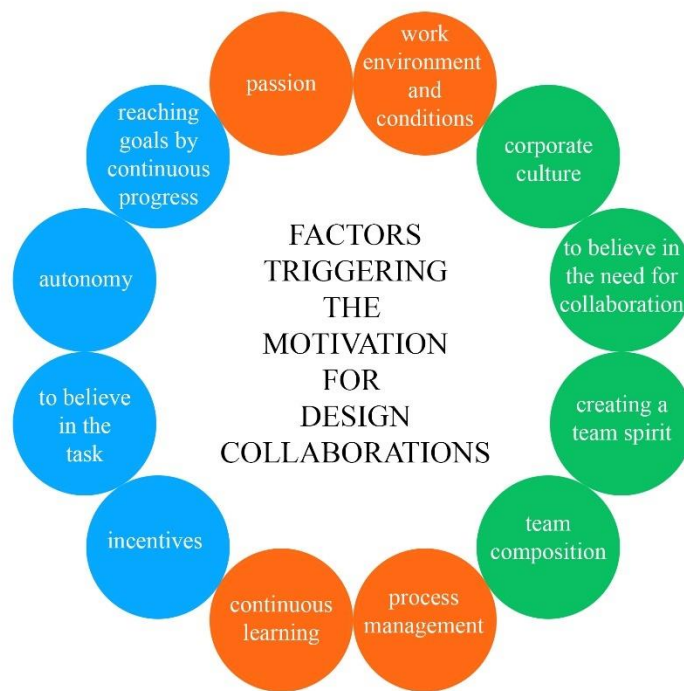


Figure 6.1. Factors triggering the motivation of actors towards the task and collaboration

Indeed, it is impossible to assert that any of the factors that are presented in this thesis can be positioned in a distinct category of factors affecting intrinsic motivation towards the task or collaboration. Searching for the ways to make actors highly motivated in design collaborations was the question to be answered by this thesis. In

the end, Figure 6.1 above shows what factors trigger the motivation of actors towards the task and collaboration.

This schema shows the main factors affecting the motivation of actors towards the task and collaboration in creative design collaborations. The factors represented in orange circles in the middle of the schema refer to the factors that affect both task motivation and collaboration motivation, which are passion, work environment and conditions, continuous learning, and process management. The factors represented in blue circles, which are reaching the goals by continuous progress, autonomy, to believe in the task, and incentives mainly affect task motivation. The factors represented in green circles, which are corporate culture, to believe in the need for collaboration, creating team spirit, and team composition mainly affect collaboration motivation (for a detailed explanation of how these factors affect task or collaboration motivation, see Sections 4.1.6, 4.2.5, 5.1.4, and 5.2.4). Finally, this schema can be used as a guide that design managers can benefit from in order to be aware of the factors that affect the motivation of the team members. However, it is hard to prioritize these factors drawing on merely the interviews.

By using this schema benefiting from the data in the related sections on how to use that factor, managers can motivate individual actors from diverse disciplines and the teams towards the task and collaboration in collaborative design processes. Increasing the motivation of actors in design collaborations is of great importance, because as Resnick (2017) explains, when people are doing a task that they are passionate about, they tend to dive in and immerse themselves like they are completely absorbed in the activity. Csikszentmihalyi (2018) names this experience ‘flow’ and this is the state that makes people exceed their limits. Findings of this study confirm this, showing that in design collaborations actors who are passionate or highly motivated about engaging in a task tend to work for long hours without even being aware of the time passing, create novel solutions by engaging a high level of creative thinking skills, and apply great effort to obtain necessary skills and knowledge.

This thesis adds on existing knowledge by showing in what ways passion can be triggered towards engaging in a task in design collaborations, because current studies confirm that the only way to tackle the challenges in creative processes is to work on tasks that people are passionate about (Resnick, 2017; Pink, 2009). Moreover, this thesis provides information on how to trigger passion towards collaboration. In design practice it is not possible to always work on the tasks that people are passionate about and it is not only a personal issue, but a collaborative one. So it is important to find the ways to increase the motivation of actors towards both the task and collaboration in collaborative design processes, which constitutes the contribution of this thesis to the existing knowledge on the motivational aspects of creative design collaborations.

6.2.2. Distinguishing the dichotomy of creative-mechanical approaches instead of the designer-engineer duality

This thesis enhances the understanding of design collaborations considering the contribution of actors from diverse fields and departments. The diversity of the positions and educational backgrounds of the interviewees provide an opportunity to analyze the experiences of actors having different work attitudes, priorities and mindsets. So, this study goes beyond current research evaluating collaborative design from the perspective of the designer-engineer duality (Pei et al., 2010; Rasoulifar et al., 2014) and opens up a new and wider perspective involving the contribution of experts from product design, product development, product management, marketing, production, purchasing, and quality departments. By doing this, I realized that there is not a clear distinction between the attitudes of experts from diverse disciplines in terms of creative problem solving and motivation towards creating a novel product.

Current research claims that conflict between engineers and designers arise from their educational backgrounds which is explained as follows: engineers are educated to employ systematic problem-solving strategies and justify solutions with facts, whereas product designers are trained to solve problems intuitively, rarely relying on

quantitative data (Pei et al., 2010). This results in a contradiction between the attitudes and problem-solving behaviors of actors having different trainings and work approaches. However, this study reveals that the distinction between the attitudes of actors from different disciplines in terms of creating novel solutions is artificial. There were both engineers and designers among the interviewees who were highly motivated to go beyond their limits to discover the creative solutions they needed. Although it was mainly the designers who stressed the positive effects of working on challenging and innovative tasks, there were also engineers who were motivated by developing creative solutions and producing novel products. So, the challenging task itself was a motivator for both designers and engineers, and even other experts.

In addition to the research on the different attitudes of designers and engineers, there is also a prevalent judgment attributed to engineers and designers in practice which presumes that designers have more of a creative approach and make use of qualitative data to offer creative solutions to the existing design problems intuitively, whereas engineers have more of a technical approach and benefit from systematic methods to solve mechanical problems rationally. To some extent this is pertinent in practice since these attitudes are the result of each group's professional training. However, this research revealed that it is not only the designers who seek creativity. Engineers and even actors from different disciplines are being motivated by the demand for creativity and challenging tasks as well. So, it is more an issue related with motivation instead of professions. Actors from diverse disciplines may exhibit creative approaches relying on their intuitions seeking for a novel product design. Overall, creative problem-solving behavior cannot be ascribed merely to designers since it is not only related with professions, but also with motivation and preferences. So, this study has confirmed that a highly intrinsically motivated person is likely to approach a given problem with a higher intensity of cognitive effort and to draw skills from other domains, or apply great effort to acquiring necessary skills in the target domain (Amabile 1997; Camerer & Hogarth, 1999). Creative problem-solving process has less to do with professions, but can be developed in relation with motivation.

6.2.3. Developing a model for creative design processes based on the motivation of actors

In his book *'Lifelong Kindergarten'*, Mitchel Resnick (2017) introduces a creative learning spiral composed of imagine-create-share-reflect, which he asserts to be the engine of creative thinking. It resembles the design thinking process composed of empathize-design-ideate-prototype-test. Both of them follow similar processes of defining a problem, searching for solutions, developing a candidate solution, sharing with others and getting feedback, and developing the idea further following the same path or approving the project. In search for creating a tool to provoke creative learning, Resnick (2017) also developed a framework that supports creative learning involving four components, which are projects, passion, peers, and play. Imposed upon the 4Ps of creative learning and creative learning spiral, this thesis offers a creative design spiral based on the intrinsic motivation of actors, which is composed of passion-purpose-product-pleasure. Although the design process can continue following the same path endlessly, I preferred to represent it with a spiral, instead of a loop. A loop does not have a starting point; however, a spiral does. Moreover, the starting point changes in the creative design process according to the motivation of the actors.

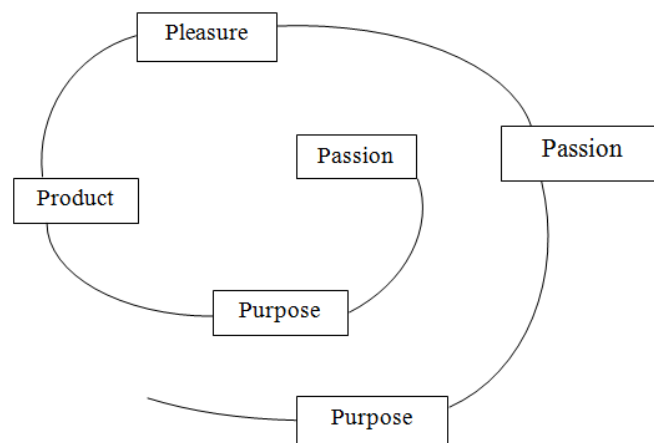


Figure 6.2. Creative design spiral for the motivated actors

For actors or teams who are motivated, the spiral starts from passion and proceeds with setting goals/scheduling the process in order to reach what is triggered by passion – in this research, mainly the product to be designed (Figure 6.2). Afterwards comes the product and when the target goal is reached – the product is developed collaboratively and even released to the market – it gives pleasure to the actors/team members, which motivates them to keep working passionately. This is what triggers passion towards designing a product collaboratively: the pleasure of the achieved task that can be possible with collaboration.

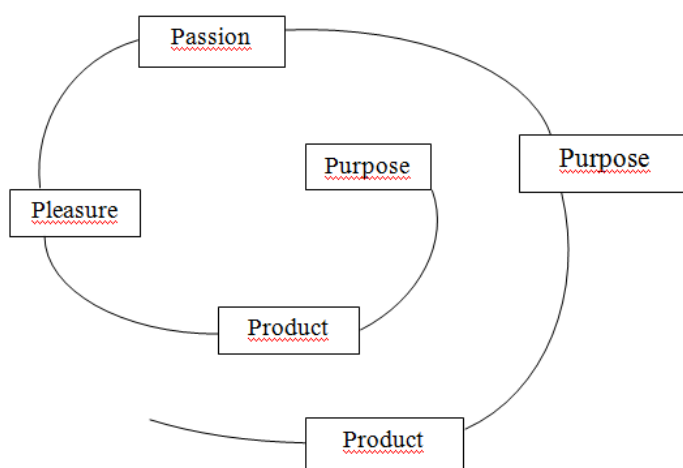


Figure 6.3. Creative design spiral for actors who are not motivated

For people/teams who are not motivated to tackle a defined design problem, on the other hand, the creative design spiral starts from purpose (Figure 6.3). The process starts when the team members are assigned to their tasks. So, the starting point of the process is ‘*purpose*’ in the creative design spiral. Then the creative design process proceeds with accomplishing the given tasks; which creates the product with the contribution of all the actors. When the product is developed and released to the market, actors – who were not motivated in the beginning – feel pleasure to be a part of the team creating that product. At this point, this feeling may trigger passion towards handling another design problem with a team to keep feeling the same way

and being satisfied with the job. As a result, the spiral proceeds following the same path. By developing a creative design spiral, this thesis explored a new way of understanding the collaborative design process in relation with the motivational aspects.

6.2.4. Exposing the importance of the design brief on the motivation of actors and effective management of the process

Although this thesis aims to focus on motivational aspects of collaborative design processes, the interview data also involve information on the effect of the design brief, which seems to be more of a technical issue at first sight. Actually, I did not expect to find data regarding the design brief as a factor affecting motivation of actors. However, when the interviewees stressed the role of the design brief on effective management of collaborative design processes and their motivation, I realized that it is a considerable finding for this thesis.

Ideally, the design brief should involve information on project definition: problem statement, the functional attributes, constraints, design, marketing and/or performance specifications, objectives, benefits of the product, and user expectations in order to lead the actors to finalize the project (Börekçi et al., 2016; Collier, 2010; Roozenburg & Eekels, 1995). Moreover, the co-evolution view of design asserts that the design problems and potential solutions co-evolve over time in an iterative process (Wiltschnig et al., 2013), in contrast to the traditional problem-solving model (Simon, 1969), where a unitary problem space is defined by a set of relatively stable requirements, specifications, and constraints.

By its nature, design problems are defined to be wicked or ill-structured in the literature (Cross, 2000; Schön, 1983). Accordingly, the content of the design briefs which set frames for the actors contributing to the design processes display a wide variety. Moreover, designers tend to treat design problems as ill-defined, which make

them generate solutions to the design problems by bringing their own approaches to the problem (Schön, 1983). However, my findings show that the co-evolution view of design, which considers design problems as mutable rather than being fixed, cause conflict between team members in collaborative design processes. The more ill-structured the design brief is, the more it causes unnecessary iterations and conflicts between team members during giving design decisions. Since actors do not work in isolation, but compete with others in search for the best solution to the existing problem in design collaborations, the design brief should be well-prepared to set the limitations and guide the actors in deciding on the right solution.

On the contrary, when the design brief is highly detailed, including technical and economic constraints, materials, design language, market-driven specifications, components layout, manufacturing capacity, norms and standards, and price-range of the product, the interviewees feel that there is no room for creativity. This is the situation that both the creative managers and actors prefer to stay away from. They insistently stressed the positive effects of creative tasks where there are not many limitations and boundaries. Conversely, both the managers and team members stressed the negative effects of routine or highly detailed tasks on their motivation as a result of the constraint.

Another dimension of the design brief stressed by the interviewees is the importance of allocating enough time to create the brief. In order to prepare a well-defined design brief, it is vital to allocate the necessary time for its preparation. However, in practice, interviewees complained about the inadequacy of the design brief in providing relevant data as a result of time limitations. It seems like managers tend to ignore the importance of the design brief on the motivation of actors and effective conduct of the whole process, and save time by allocating less time for the preparation of the design brief than required. This attitude results in a decrease in the guidance of the design brief while managing the process and making design choices. In sum, this thesis has demonstrated the importance of a clearly defined design brief created in a time period

required for its preparation on effective management of collaborative design process by enhancing motivation, eliminating conflict, and preventing unnecessary iterations.

Together with the previously discussed conclusions, it is possible to say that although this thesis presents factors affecting the intrinsic motivation of actors from different disciplines towards the task and collaboration, these factors cannot provide a permanent increase in motivation or produce the same results in every situation. As Amabile and Pillemer (2012) state, *'the motivation to do creative work can surely shift from day to day and even moment to moment'* (p. 4). Hence, in design collaborations – and even in general – these factors should not be evaluated as increasing intrinsic motivation when applied once or recurrently for a while. These are factors that should always be kept in mind and benefited from in order to increase the intrinsic motivation of actors towards providing a creative design solution or design collaboration. Among all the factors, passion is a key factor that enhances task and collaboration motivation and increases performance towards going beyond all limits to reach a target goal: the product to be designed. This thesis provides factors that provoke actors to perform their best in collaboration with others to reach their goals and gain pleasure in return. All in all, it is vital to create an understanding in actors contributing to collaborative design processes that *'if we do not all win, we all lose'*.

6.3. Recommendations for future research

I discussed the limitations of this study in terms of methodological approach in Section 3.4.6. Whilst this study provides a new perspective – a motivational approach – to the existing knowledge on design collaborations, it also has some limitations. Therefore, in this section, I will indicate the limitations of the study, considering them as the routes for further research.

As I indicated in the beginning of this chapter, for several decades, creativity researchers considered creativity as something inherent in some unusual people and

developed a person-centered approach to explain how they think and work (Amabile, 1997). Although this research approach provides limited information for understanding what creativity is – as a result of ignoring the social aspects – it still yields some important findings on creativity from personal aspects (Amabile, 1997). In a similar manner, the motivational aspect of design collaborations can be extended by focusing ‘*only*’ on the experiences of passionate actors contributing to collaborative design processes. This means a shift in the focus of selection of the interviewees from the ‘*creative*’ actors from different disciplines who contribute intensely to the collaborative design process to the ‘*passionate*’ actors.

Secondly, seeking for the manager-employee dichotomy in terms of their approaches towards motivation in design collaborations will contribute to existing knowledge. However, it is hard to achieve, for two reasons. The first one is that it is hard to gain access to the managers and employees working on the collaborative design process of a company and convince them to contribute to the research. This difficulty was one of the reasons that necessitated a shift in my interviewee selection method as I explained in Section 3.4.6. The second one is that it may be hard to find a manager and an employee working passionately in design collaborations in the same company.

The third route to enhance our understanding of the motivational aspects of design collaborations may be to search for the validity of the creative design spiral developed as a model to understand the motivational aspects of design collaborations. In order to deepen our understanding of the collaborative design process from a motivational perspective, the creative design spiral itself can be used as a path to follow for future research. This thesis provides information on the first step of the spiral – passion – by questioning what factors trigger intrinsic motivation for creative design collaborations. The second step – purpose – can be questioned as ‘how does passion translate into actions in design collaborations?’ The third step – product – can enhance our knowledge by questioning ‘why it is important to see the product on the market’.

The forth step – pleasure – can be questioned as ‘What are the sources of pleasure in the whole collaborative design process, and how does pleasure turns into passion?’

Lastly, doing this research in Turkey has some limitations as I explained in Section 2.7. Since the economy in Turkey is mostly based on small and medium-sized enterprises with limited design awareness (Topaloğlu & Er, 2010), the professionalization of industrial design discipline has not been achieved, yet. As a result, the data gathered in this research has been affected from being conducted in an environment where the status of industrial designers is not clearly defined and accepted in the industry and the consciousness on the effective management of the collaborative design process is not high. If this research was conducted in another circumstances where design awareness is higher and the design discipline is prominent, the results should be different. So, conducting a research on the motivational aspects of collaborative design processes in a developed country with a high perception of design discipline and collaborative design processes should provide data from different aspects, which will also provide an opportunity to make comparisons between the situation in a developing and a developed country.

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APPENDICES

A. Letter of Invitation

TÜRKİYE’DE TASARIMDA DİSİPLİNLER ARASI ÇALIŞMA YAKLAŞIMLARI ÜZERİNE BİR İNCELEME

Firma Davet Mektubu

Bu çalışma, araştırmacı Gülen Özdemir tarafından Orta Doğu Teknik Üniversitesi Endüstri Ürünleri Tasarımı Bölümü’nde yürütülmekte olan doktora tezi kapsamında yürütülmektedir. Çalışma, Türkiye’de kurumsal firmalarda yürütülen tasarım projelerinde disiplinlerarası çalışmaya odaklanmaktadır. Farklı disiplinlerde uzman kişilerin birlikte çalışma modellerini inceleyerek, uygulamadaki işbirliği süreçlerini haritalandırmayı ve farklı dinamiklerin süreç üzerindeki etkilerini ortaya koymayı amaçlamaktadır.

Günümüzde, endüstriyel ürünlerin giderek karmaşıklaşması, fonksiyonel yenilik talebinin artması ve ürünlerin tasarımdan piyasaya sunumuna kadar geçen sürenin kısaltılması gibi pek çok sebep, tasarımda disiplinler arası işbirliğini gerekli kılmaktadır. Sistematik tasarım metotları bu sürecin sağlıklı yönetilmesi için bazı araçlar sunsa da, bilinmektedir ki uygulamada, birbirinden farklı bakış açıları ve meslek pratiklerine sahip kişilerin bir arada çalışma sürecinde aynı dili konuşmaları dahi her zaman mümkün olmamaktadır.

Dolayısıyla değişken dinamiklerin etkisiyle geliştirilen disiplinler arası tasarım süreçlerinin, bu süreci oluşturan katılımcıların perspektifinden yeniden çizilmesi, işbirlikçi tasarım sürecinin daha iyi anlaşılmasını sağlayacaktır.

Bu perspektifin yeniden çizilmesi ise, ancak disiplinler arası tasarım süreçlerinde deneyimli firmaların bu çalışmaya gönüllü katılımıyla mümkün olabilir. Bu çalışmaya katılmayı kabul etmeniz durumunda firmanızdan beklenen, firmanızda bu tür süreçlerde aktif olarak yer alan çalışanlarla (endüstriyel tasarımcı, mühendis, proje yöneticisi, vb.) görüşmeler yapılmasına izin vermenizdir. Bu görüşmelerle tamamlanmış ya da devam etmekte olan bir tasarım projesinin sürecini örnek olarak ele alıp, onun üzerinden yapılan disiplinler (ya da birimler) arası işbirliğinin haritasını çıkarmak hedeflenmektedir. Firmanızda geliştirilmiş, geliştirilmekte olan ve üretilen hiçbir tasarım ürünün kendisine (fiziksel yapısı, teknolojisi, üretimi, pazarlaması vs.) ilişkin herhangi bir inceleme talep edilmemektedir. Burada araştırmacının ilgilendiği yalnızca disiplinler arası tasarım sürecinin kendisidir. Dolayısıyla sürecin katılımcılarından da talep edilecek olan, kendi perspektiflerinden tasarım sürecinin ve işbirliğinin nasıl yürüdüğünü anlatmaları olacaktır.

Bu çalışma, firmanızın değerli zamanını talep ederken, toplanan verinin analiziyle size şu şekilde yararlı olmayı hedeflemektedir:

- Firmanızda yürütülmekte olan disiplinler arası tasarım sürecinde yaşanan aksaklıklar ve bu aksaklıkların olası sebeplerinin ortaya çıkarılması
- Değişken koşullar altında ortaya çıkan farklı çalışma modellerine ilişkin bir kılavuz elde edilmesi

Bu çalışma kapsamında elde edilecek tüm bilgiler, yalnızca yukarıda açıklanan amaçlar doğrultusunda kullanılacaktır. Ayrıca görüşme yapılacak kurum ve kişilerin kimlikleri gizli tutulacak olup, araştırma sonucu yayınlanacak hiçbir çalışmada kimliğinizi deşifre edecek bilgilere yer verilmeyecektir.

Firmanızın bu çalışmaya katılması, ortaya konulacak araştırmanın niteliğine büyük katkı sağlayacaktır. Desteğiniz için şimdiden teşekkürler.

B. Transcription of an Interview in the Original Language

G: Çalışmamızda, endüstride disiplinler arası çalışmalar nasıl yürütülüyor, bu süreçler kişiler tarafından nasıl deneyimleniyor, siz nasıl yaşıyorsunuz bu süreci, bu deneyimleriniz neler, onları dinlemek istiyorum. Bunun için de en başta seni tanımak istiyorum. N. Ö. Çalıştığın kurumdaki unvanla başlayalım mı?

N: Ürün geliştirme mühendisi.

G: Peki, kaç yıldır bu firmadasın?

N: 3 yıl olmak üzere.

G: Peki, önce o zaman sen bana kariyerinden genel olarak bahseder misin? Daha önce nerelerde çalıştın, hangi pozisyonlarda çalıştın, kaç yıldır profesyonel olarak işini yapıyorsun? Oradan başlayabiliriz.

N: 2006 yılında iş hayatına başladım. Mobilya sektöründe ağırlıklı olarak çalıştım. Mutfak banyo mobilyası teşhir ve tasarım departmanlarında çalıştım. Ürünün hem kendisini tasarlıyordum, hem de showroomdaki teşhirlerin de tasarımı mutfak sektöründe çok önem arz ettiği için, bitmiş ürün o olduğu için, onun da tasarımı bir arada, tek bir departman gibiydi, o alanda çalıştım. Bunun dışında hammadde olan MDF üreticisinde tasarımcı olarak çalıştım.

G: Orada tasarımcı olarak çalıştın?

N: Endüstriyel tasarım yöneticisi olarak çalıştım. Orada da tasarım şöyle işliyor, oradaki tasarımın mantığı da aslında tam olarak öğrendiğimiz bir endüstriyel tasarım yok fakat orada da desen tasarlıyorsunuz veya tasarlatıyorsunuz. Aynı zamanda bu desenlerin uygulandığı profiller tasarlanıyor.

G: Profil derken?

N: Ahşap profil, mobilya üretiminde kullanılan ahşap profiller. Profillerin kendisi ürün olarak önce tasarlanıyor, sonra da tüketiciye referans olabilecek, yine hem showroumlarda kullanılmak üzere, daha doğrusu mobilya üreticisine referans

olabilecek bitmiş mobilya – yani bizim anladığımız anlamdaki – ürünlerin tasarımı yapılıyor. Böyle bir işte çalıştım. Şu an çalıştığım firmada ürün geliştirme mühendisi olarak çalışıyorum. Aslında tasarımcı olarak değil ama tasarım süreci, yani ürün geliştirme süreci olarak adlandırılıyor, o sürecin bir parçası olarak çalışıyorum. Bir de başka bir seramik firmasında çalışmıştım. O da seramik sağlık gereçleri sektöründe, klozet, lavabo gibi seramik sağlık gereçlerinde. Orada da tamamlayıcı ürünler – mesela bir rezervuar panelinin basma butonu – yani tali ürünler aslına bakarsan. Dışarıdan tasarım desteği alınarak tasarlanmayan, ihtiyaca göre şekillenen; hela taşı, mesela akrilik bir duş teknesi, projelere göre veya o anki müşteri ihtiyacına göre yenilenmesi beklenen ürünlerin tasarımı gibi, orada da böyle bir iş yaptım.

G: Tamam. Peki sen ne sıklıkla disiplinler arası tasarım projelerinde çalıştın? Şimdiye kadarki tüm kariyerinden bahsediyorum. Yani bunların ne kadarı bireysel – daha bireysel diyelim, tamamen bireysel olamaz ama – yoğunluklu olarak 1 ya da 2 kişiye odaklanan işlerdi? Benim ilgilendiğim kısmı daha çok, daha fazla sayıda uzmanın ve farklı alanlardan kişinin bir arada bulunduğu projeler. Şu ana kadar çalıştıklarının ne kadarı böyle iş birliğine odaklanmış projelerdi sence?

N: Şu ana kadar şu an çalıştığım firma dışında hepsi bireysel olarak, ya da en azından sadece işte bir departmanın sadece sorumlu bir kişisiyle görüşerek, bilgi alışverişi yaparak çalıştığım oldu. Ama şu anda yani son 3 yıldır, yani 2006'dan bu yana 12 yıl dersek, 12 yılın son 3 yılında aslında senin sorduğun sorunun cevabını ben de yaşıyorum. Pek çok farklı departmanın bir araya gelerek, belli aşamalarda katkı sağlayarak geliştirdiği bir süreç var şu anda. Onun dışındakiler hep daha bireyseldi. Mesela işte işi veren, satış departmanının müdürüyse, müşterim o oluyordu ve onunla sadece diyalog halinde olarak bu işi yürütüyorduk. Ya da işi veren mağazanın sahibi, bayi, onun showroom'unun tasarlanması, veya işi veren sadece benim tasarım departmanının müdürü, sadece onunla diyalogda olarak bir mutfak mobilyası tasarımı yapıyordum. Şu anda bulunduğum konumda ve firmada ise bu şekilde değil. Farklı departmanlar bir araya gelerek çalışıyoruz.

G: Peki, neden sence arada böyle bir fark var, neden öncekiler daha dar ekipler tarafından yürütülüyordu, ya da bireyseldi de şimdi daha geniş bir ekiple tasarlıyorsunuz ürünleri? Aradaki fark ne? Projeler mi farklı?

N: Şöyle, şimdi mesela diğer çalıştığım yerler de aslında kurumsal firmalardı, ya da en azından kurumsal denebilecek firmalardı ama marka değerleri ya da hizmet sektörleri, bence markanın değeri olarak baktığınızda, biraz daha altta kalıyorlardı, henüz bence disiplinler arası çalışmanın faydasını anlayabilmiş değillerdi, en azından benim çalıştığım dönemlerde – belki onlar da şu anda böyle çalışıyorlardır – o yüzden de bakıyorsunuz mesela şu an çalıştığı firma çok bilinir bir marka. Şu an çalıştığım firma bunun bence ayarına varmış, disiplinler arası çalışmanın, aslında bütünsel olarak bakınca, müşteri ihtiyacına doğru şekilde gittiğini, doğru marka algısı yarattığını ayırt etmiş bir firma, o yüzden bu şekilde çalışıyoruz. Bu arada cevap verdim mi ben başka bir yere mi gittim?

G: Yok yok tam olarak beklediğim yöndeydi. Peki, şu an çalıştığın yerde kimlerin yoğun olarak birlikte çalıştığını düşünüyorsun ve gözlüyorsun? Bu ekipte kimler var, birlikte çalıştığın ekipte?

N: Şöyle, bir yürün yönetimi yani pazarlama müdürlüğünün altında ürün yönetimimiz var. Onlarla. Projenin asıl sahibi ürün yönetimi. Çıkacak olan son ürünün sahibi ürün yönetimi. Dolayısıyla süreci de onlar yönetiyor. Sonra ikincil olarak tasarım departmanı ve biz ürün geliştirme ve hemen ardından birlikte çalıştığımız satın alma, çünkü malzeme tedarigi zaten ürünün ana konusu, çok sıkı, çok dirsek teması yüksek bir şekilde çalışmamız gerekiyor ve tabiki sonunda da – aslında tam olarak en sonunda değil ama – bu sıralamanın içinde bir de üretim. Ürün geliştirme departmanı olarak zaten üretimin tekniklerine ve kapasitesine, yapabileceklerine hakimiz. Fakat tabi ki üretimle de Onun hemen arkasından kalite departmanı ve müşteri hizmetleri departmanı – ürünün kusurlarıyla ilgili şikayetleri toplayan, veya ürünün satın alındıktan sonra montajını, servise yönlendirmesini yapan departman. Dolayısıyla önceden bunları önleyebilmek için, onlarla da kontak halinde çalışıyoruz. Ürün

çıkmadan en azından, birkaç kez, mutlaka onlarla da birlikte çalışma yapılarak ilerliyor süreç.

G: Yani bu departmanların tamamı ürün çıkmadan bir araya gelmiş mi oluyor, saydığın departmanlar?

N: Evet, en az 3 defa. 1 yıllık bir süreç var, bu 1 yıllık süreç içerisinde 3 tane prototip toplantısı var. Bu 3 prototiptoplantısının tabi ki dışında da her hafta yapılan, tüüüüm projelerin değerlendirildiği, bütün konuların değerlendirildiği, tasarım departmanı, pardon, ürün yönetimi ve ürün geliştirmenin katıldığı toplantılar var. Aylık olarak da tüm ekiplerin, yani üretim, kalite, müşteri hizmetleri, tasarım, ürün geliştirme, tüm departmanların katıldığı toplantılar var. Bunlarda sözlü olarak projenin gidişatıyla, akıbetiyle ilgili konular konuşuluyor ve tartışılıyor. Satınalma da var bu toplantılarda. Onun dışında 3 tane de prototip toplantısı yapılıyor. Bu toplantıda da ürünlerin prototipleri üzerinden konuşuluyor. Dışarıdan tasarım desteği alınıyorsa eğer, tasarımcı katılıyor bu toplantılara.

G: Tamam, ben şu an çalışmam kapsamında dışarıdan destek aldığınız proje süreçleriyle ilgilenmiyorum. Kendi içinizde yürüttüğünüz projelere bakacağız. O yüzden zihnini hiç orası meşgul etmesin.

N: Tamam.

G: Departmanlardan bahsettin ya, kimler var disiplinler arası tasarım sürecinde diye – bunun dışında bir de uzmanlık olarak saysan hangi mesleklerden, hangi alanların uzmanları bir arada çalışıyor bu süreçte?

N: Bir kere mühendislik kısmı yoğun, neden diyeceksin, çünkü ürün yönetimi dediğimiz departmanlarda çalışan insanlar ağırlıklı olarak mühendisler. Endüstri mühendisleri çoğunluklu olarak. Veya işletme ya da işletme mühendisliği alanlarından insanlar da var. Ürün geliştirmemizde hem mühendisler, mesela bizim banyo mobilyası üretiminde ağaç işleri endüstri mühendisi, iki tane de endüstriyel tasarımcı var. Endüstriyel tasarımcılar bizim şirkette sadece tasarım departmanında değil, ürün

geliştirme departmanlarında da çalışıyor. Bizim dışımızda da var şirketin diğer alanlarında. Tabi yani mesela işte kalite departmanı dediğimizde mühendis, satın alma dediğimizde mühendis, daha çok mühendislik yani var. Ve endüstriyel tasarım var.

G: Başka işletmeden falan? Mesela pazarlama kısmında kimler var?

N: Valla yani ürün yönetiminde olabiliyor, zaman zaman öyle de oldu ama mesela şu anki çalıştığımız ürün yönetimi ekibi tamamen mühendis. Bir tanesi malzeme ve metalürji mühendisi, iki tanesi de endüstri mühendisi. Bizim departmanımız iki endüstriyel tasarımcı, bir ağaç işleri endüstri mühendisi; satın alma, bir işletme, bir ağaç işleri endüstri mühendisi; kalite departmanı, kimya mühendisi; müşteri hizmetlerini bilmiyorum ama mühendislik onların da sanıyorum.

G: Tamam, peki. Şu anki firmada çalıştığın tüm projeler bu ekiplerin bir arada yürüttüğü projeler mi? Arada daha farklı olanlar var mı?

N: Evet. Mesela sadece ürün yönetimi ve bizim aramızda yürüyen projeler oluyor. O da nasıl oluyor, mesela mevcutta bir ürünün, hali hazırda tasarlanmış ve bu süreçten geçmiş bir ürünün – her şeyiyle yani, kalite departmanından geçmiş, müşteri hizmetleri departmanlarından geçmiş, bitmiş, seriye alınmış, piyasaya sunulmuş bir ürünün – ölçüsünün değiştirilerek başka bir isimle bir özel müşteriye, işte o isimle, belli bir bölgeye ya da yurt dışında atıyorum sadece belli bir bölgeye satılmak üzere çıkarılması gibi durumlar var. Bunlar ürün yönetimi ve bizim aramızda yürüyor, ürün geliştirme departmanı arasında yürüyor. Fakat kullanılan yeni bir malzeme varsa şayet, ya da testten geçmesi gereken herhangi yeni bir konu, uygulama varsa, mutlaka yine kalite departmanı ve müşteri hizmetleri departmanı da bir şekilde dahil oluyor bu sürece.

G: Tamam. Şimdi bana, aklına gelen herhangi bir ürün tasarım sürecinden, yani tasarım, ürün geliştirme, kalite, bu sürecin tamamını kapsayacak şekilde, normalde orada bu iş akışı nasıl yürüyor, başından sonuna genel hatlarıyla anlatabilir misin?

N: Şöyle oluyor: Tasarım departmanı önce bir brief hazırlıyor. Tasarım brief'ini

hazırlıyor.

G: Tasarım departmanı?

N: Pardon yanlış söyledim. Ürün yönetimi departmanı.

G: Tamam.

N: Ürün yönetimi evet. Tasarım departmanına brief'i veriyor. Tasarım departmanı çalışıyor. Önce ürün yönetimine kendi içinde sunumlar yapıyor. Kendi aralarında bu ürünün piyasadaki geçekliklerini, olası gerçekliklerini tartışıyorlar, karar verdiklerinde 3d dataları ürün geliştirme departmanına geliyor. Bu 3d datalarda herhangi bir üretim yöntemi veya detaylar çözülmüş olmuyor. Malzeme konusunda da sadece işte onların bize yönlendirdiği referanslar oluyor.

G: Peki nasıl bir brief veriyorlar? Brief'in içeriği ne oluyor? Ne kadar bilgi var onda?

N: Brief'in içeriği şöyle: bir kere benchmark olarak aldıkları firmaların örnek ürünleri dahil oluyor brief'in içerisinde, hangi kullanıcı segmentine hitap edebilir– bizim segmentasyonumuz eco ürünlerden başlayıp upsegmente kadar kapsayan bir ürün gamımız var – up, mid-up, - yukarıdan aşağıya doğru inersek – mid, mid-low, low ve en altında da eco diye segmentasyonumuz. Dolayısıyla burada hangi segmente hitap edeceği bilgisi oluyor. Ve tabi bu segmentasyonu verirken, aslında bir nevi malzemeyi de, malzeme bilgisini de, ya da en azından üretim yöntemi bilgisini de vermiş oluyorlar. Çünkü mesela lake bir ürünü mid-low ya da mid segmente yerleştirmiyoruz. Ürün yönetiminin kendi içinde belirlediği, üretimden gelen gerçek bilgilerle belirlediği bir standardizasyon var. Arada bunlar bir basamak yukarı ya da bir basamak aşağı kayabilir – projenin durumuna göre – ama genel anlamda değişmez. Mesela doğal kaplamalı bir ürün her zaman up ya da mid-up'tadır, hatta mid-up'tadır çoğunlukla. Bu bilgiyi de aslında tasarımcıya vermiş oluyor, bunu tasarımcı da aslında biliyor ama yine de bu da paylaşılıyor. Onun dışında işte fuarlardan veya trendbooklardan elde edilen trendlere dayanarak da bir takım renk-ton bilgileri de aslında ürün yönetimi tarafından tasarım departmanına veriliyor fakat tasarım

departmanı da burada kendi bilgisini tabi ki koyuyor ortaya. O arada onlar kendi aralarında zaten bunu birkaç kez tartışarak sonlandırıyorlar. Tam olarak tabiki brief'in içerisindekiler net, bitmiş halini %100 tanımlıyor denemez.

G: Tamam. Ürün yönetimi, tasarım departmanına bu brief'i veriyor. Tasarım departmanı dijital olarak tasarım alternatifleri mi hazırlıyor? Doğru mu anladım?

N: Evet. Tasarımın nihai halini, yani mesela aslında birkaç alternatif üzerinden gidilmiyor. O alternatifleri kendileri görselleştirerek, ürün yönetimi ile aralarında karar vererek eliyorlar. Bazen, çok nadir, yani her projede olmamakla birlikte, bu sürece biz de dahil oluyoruz. Şöyle dahil oluyoruz: eğer bu alternatiflerin üretimiyle ilgili herhangi bir soru işareti varsa kafalarında, üretilebilirliğiyle ilgili, biz de dahil oluyoruz. Biz de tasarımı ne kadar oranda somutlaştırabileceğimizi, gerçekleştirebileceğimizi anlatıyoruz, böyle bir projemiz oldu. Ona göre ya tasarımı tamamen değiştiriyorlar, ya da o alternatifi belki hiç kullanmıyorlar ya da biraz, ufak tefek üzerinde değişiklikler yaparak, endüstriyel anlamda gerçekleştirilecek hale dönüştürüyor. Bu aşamada da bazen bu anlamda dahil oluyoruz.

G: Tamam. O zaman o ilk adımda iki departman bir arada çalışıyor: ürün yönetimi ve tasarım bir arada çalışarak...

N: Ağırlıklı öyle.

G: Alternatifler içinden seçim mi yapıyorlar sonra, gerekirse sizle görüşüp?

N: Aynen öyle, bir seçim yapıyorlar ve o seçim bize ulaşıyor. Sonra biz de o seçim üzerinden...

G: Pardon, size ürün yönetimi mi ulaştırıyor, kendi aralarındaki bir toplantıyla karar verip?

N: Evet, bize ürün yönetimi ulaştırıyor. Ürün yönetimi her zaman üretim tarafıyla tasarım tarafının arasında aslında bir köprü. 3D datayı da onlar bize iletiyor yani o dijital verileri de onlar iletiyor bize. Veya öncesinde bir sunum yapıyorlar. Herkesin bir arada olduğu yine - satın alma veya işte kalite departmanının bir arada olduğu -

bize geliyor. Biz bu tasarım üzerinden kendi içimizde kalite departmanı ile bir değerlendirme yapıyoruz. Design fmea yapıyoruz aslında bir nevi, yani gördüğümüz riskleri aslında paylaşıyoruz. Bunlarla ilgili mesela bizim standart formlarımız var, onları dolduruyoruz. O formlar bir şekilde bir alanda, ortak bir alanda depolanıyor. Bu bilgiler ışığında geri bildirim veriyoruz.

G: Tasarım departmanına mı?

N: Biz ürün yönetimine geri bildirim veriyoruz.

G: Tamam.

N: Onlar da tasarım departmanı ile eğer tasarımı etkileyen bir takım şeyler varsa bunları paylaşarak, üzerinde değişiklik yapıyorlar. Ama genelde gerçek hayatta öyle olmuyor. Sonradan değiştiriliyor onlar. (güler)

G: Peki, diyelim ki işte siz üretime dair gördüğünüz şeyleri söylediniz, düzeltilmesi gereken, ve bunları ürün yönetimine aktardınız. Bu birbirinden bağımsız, siz tasarım yönetimiyle doğrudan bir arada çalışmıyorsunuz, hep tasarım yönetimi aracılığıyla, şey ürün yönetimi

N: Daha sonra birebir de çalışıyoruz ama bu aşamada ürün yönetimi hakimiyeti kaybetmemek adına aslında bu yapı, yoksa tabiki mesela günlük hayatın içerisinde biz birbirimizle konuşuyoruz yani (güler) yasak değil birbirimizle konuşmamız ama asıl temel ana konuları onlar üzerinden alışveriş yapıyoruz. Onlar hakimiyeti kaybetmesinler diye böyle yapılıyor. Yoksa onun dışında mesela ben diyorum ki işte şu datanın birazını, şurasını şöyle silip yollar mısın bana diyorum, yolluyor mesela. Günlük hayatın içerisindeki şeyler, zaruriyetler farklı tabii ki.

G: Peki o 'şunu değiştirip yollar mısın' dediğinde cc'de ürün yönetimi de oluyor mu? Yani onlar bu tür durumlardan hep haberdar mı?

N: Hayır olmuyor. Bazılarında. Yani biz ürüne müdahale edecek değişiklikleri onlar olmadan yapmıyoruz. Ama mesela datada işte kulpla kapak bir arada ama ben diyorum ki bana kulpla kapağı ayrı yollar mısın, öyle bir resme ihtiyacım var diyorum.

G: Anladım.

N: Bu tür konularda kendi içimizde konuşuyoruz.

G: Tamam, peki, sonra? Siz geri bildirim verdiniz, sonra onlar kendi içinde revizyon mu yapıyor?

N: Onlar kendi içlerinde tartışıyorlar, değişmesi gereken herhangi bir şey varsa değiştiriyor ve tekrar data bize ulaşıyor.

G: Tamam.

N: Bizim sürecimiz o datalar bize ulaştıktan sonra aslında başlamış oluyor. Zaman bize oradan itibaren işliyor. Zaman işlemeye başladıktan sonra hemen bir tarih koyuyoruz. 8 hafta falan sürüyor bu aslında ortalama. Ama tabiki hiçbir zaman 8 haftayı bulmuyor yani 4-5 haftada hemen ilk prototipi yapmak için başlıyoruz işte satın alma, ürün yönetimi, tasarım, aramızda işte mail zincirleri dönerek malzeme araştırması, işte ben araştırıyorum, buluyorum, numunelerimi istiyorum satın almadan. Satın alma getiriyor. İşte tasarımcılar bazen fabrikaya gelerek – ofisleri ayrı bir yerde – işte hep birlikte değerlendiriyoruz. Bazen ufak, böyle minik prototipler yapmamız gerekiyorsa hemen onları yapıyoruz, onların üzerinden gösteriyoruz. Bazen o arada bu süreçte sadece ebat görmek istiyorlar işte ham mdf’den bir kutu yapıyoruz, sadece oranlarını görsünler diye. Yine bir araya geliyoruz bu süreçlerin, bu prototip toplantılarının dışında.

G: Ama onlar gerekli durumlarda gayri resmi yapılan görüşmeler herhalde değil mi?

N: Bunları böyle hep işte belirli bir zaman planına uyum içerisinde değil, kendi içimizde bir koordinasyon sağlayarak, yine hep birlikte konuşarak yapıyoruz aslında. Yani birbirinden habersiz yapılan şeylerde de insanlar birbirine itiraz ediyor. Sen bunu yaptın ama benim bundan haberim yoktu, neden diye bunlar birbirine hesap soruluyor yani. Bir açıklaman olması gerekiyor yani.

G: Tamam peki. Prototip yaptınız birlikte çalışarak, numuneler geldi, sonraki aşama?

N: Bir sonraki aşamada da herkes, tasarım departmanı görsel ve fonksiyonel yapmaya çalıştığı şeylerle ilgili yorumlarda bulunuyor. Biz, üretim, işte onun teknik olarak üretilebilirliği, ya da üretim açısından zorlukları, nasıl bir çözüm bulabileceğiniz, bunları anlatıyoruz. Kalite departmanı şu riskli bu riskli diye bitmiş ürün üstünde de yorum yapıyor çünkü çizim üzerinden bazen bazı şeyler kaçabiliyor. Bu arada bazı şeyleri de test ettiriyor oluyoruz kalite departmanına mesela yeni bir kulpu değil mi, o kulpu verip test etmesini istiyoruz. Bu arada test süreçleri de başlamış oluyor ama bitmiş ürünün testi yapılmamış oluyor. Bu toplantının sonunda da bir sonraki toplantıda ne gibi değişiklikler olacağına karar veriliyor. Ürün yönetimi bunlarla ilgili bir karar notu hazırlıyor yayınlıyor, ikinci prototip süreci başlıyor. Bu arada da eğer çok büyük değişiklikler yoksa biz o ürünü kalite departmanına veriyoruz test etmesini istiyoruz.

G: Tamam, peki. Eğer çok büyük değişiklik varsa?

N: Testlerini yapmıyoruz. Bir sonraki prototipten sonra yapıyoruz.

G: Tamam. Ama tasarım departmanına mı gidiyor ürün? Çok büyük değişiklikten kastın? Ürün geliştirmeye mi geliyor?

N: Yok, ürün geliştirmede oluyor daha çok. Tasarım departmanı artık bu aşamadan sonra daha çok sözlü olarak yönlendiren olmaya başlıyor.

G: Peki şeyi soracağım, bir ürün tasarım süreci 1 yıl mı sürüyor, yanlış mı anladım?

N: Bir serinin, bir seriden kastettiğimiz de yaklaşık 100'le 150 SKU arasında ürün olan bir seri. Ama sadece senede 1 seri çıkmıyor. Senede 5-6 seri çıktığı dönemler de var, senede 3 seri çıktığı dönemler de var. Buna da yine ürün yönetimi karar veriyor. Ama ürün geliştirme süreci toplam her bir seri için 1 yıl.

G: Brief'le başlayıp bitmiş ürüne kadar 1 yıl sürüyor, yani planınız bu şekilde. Peki dedin ya bize geldiğinde zaman başlıyor ve 8 hafta oluyor bu süreç dedin. Ama biz 4-5 haftada bitirmeye çalışıyoruz.

N: Prototip yapmak için 8 haftamız var. Bu 8 haftanın sonunda bir toplantı oluyor.

Ama tabiki o 1 yıllık sürecin bir kısmını tasarım ve ürün yönetimi yemiş oluyor aslında ilk başladığımızda. Yani bizim 1 yıl değil toplam, her şey 1 yıl.

G: Anladım, orada benim merak ettiğim, 8 hafta ama biz genelde hani 4-5 haftada bir prototip elde etmeye çalışıyoruz dedin ya, neden 8 haftanız varken 4-5 haftada bunu bitirmeye çalışıyorsunuz?

N: Çünkü genelde tasarım ve ürün yönetimi arasındaki süreç daha fazla – verilen zamandan daha uzun – sürüyor.

G: Hmm, size geldiğinde zaman daralmış oluyor aslında takvime göre, anladım. Peki, çok iyi çalışan bir ürün tasarım sürecini hayal etsen, şu ana kadar içinde bulunduğu projelerden en iyisini düşünsen, bunun, bu anlattığın standart süreçten farkları nelerdi onu merak ediyorum. Süreci önce bir düşün istersen, hangi üründe iyi çalıştı bu süreç, ya da hani o ‘iyi’ ile kastını da sen söyle, neden iyi olduğunu düşündüğünü de sen söyle sürecin...

N: Şöyle, mesela bizim kendi aramızda da aslında ‘vay be, şu ürünü de aslında biz çok iyi yönetmişiz, süreç çok iyi ilerlemiş’ dediğimiz bir serimiz var. Geçen yıl benim yaptığım bir, yani görevli olarak, şimdi biz tabi 3 tane mühendisiz, herkesin bir projesi oluyor, şansa benim o projemin süreci çok iyi ilerledi. Çünkü sadece benle alakalı bir şey değil. [21.1] Bir kere ürün yönetiminin kontrolü hiç bırakmadığı - çok iyi hakim olduğu projeler çok iyi ilerliyor çünkü onların görevi biraz da insanları baskılamak, yani ittirmek yani dürtüklemek. Böyle bir gerçeklik var.

G: Tamam, bu proje yine bir banyo mobilyası tasarımı değil mi? Serinin ne olduğunu paylaşmanda sakınca var mı?

N: İsim mi?

G: Nasıl bir projeydi? Tarz olarak yada farkı var mıydı diğerlerinden?

N: Farkı şöyle, aslında yenilikçi bir projeydi, pek çok anlamda yenilikçiydi, ona rağmen iyi ilerlemiş bitmişti. Seri dediğimiz şey de şöyle oluyor mesela: lavabo dolapları oluyor, lavabo dolaplarının da kapaklı versiyonu, işte tek çekmeceli, çift

çekmeceli versiyonu ve bunların her birinin 60, 80, 100, 120 genişliğindeki ölçüleri, 4 tip boy dolabı, 2 tip çamaşır makinesi dolabı, bir tane ek ünite dediğimiz, küçük, lavabo dolabı olmayan ama yerde duran ünitesi, işte bir tane bu ünitelere alıp üzerine koyabileceği bir konsolu, falan gibi olan böyle oldukça detaylı bir projeydi.

G: Ve yenilikçi bir projeydi?

N: Yenilikler vardı içinde. Mesela işte çamaşır makinesi ünitesi - şu anda piyasada olan bir ürün bu arada, işte çamaşır makinesi ünitesi, yanında sepeti var, reklamlara falan çıkıyor. Temizlik malzemelerini koyabileceğin bir boy dolabı var altında plastik bir tabanı var, sökebiliyorsun, yıkayabiliyorsun falan gibi hani yenilikler de olan bir proje olmasına rağmen çok zamanında, çok net bir şekilde ilerledi. Dediğim gibi işte bunun bence asıl, temel sebepleri: 1. [21.1] Ürün yönetiminin çok güzel, bütün gerekli kişilere gerekli zamanlarda görevlerini sürekli olarak hatırlatması, takip etmesi; onun ötesinde tasarım departmanı mesela çok zamanında zaman planına uygun şekilde tasarımı tamamladı. Çok hızlı bir şekilde geri bildirim biz de verdik. Oradan zaten hızlı başlayan proje çok güzel ilerliyor.

G: Peki bu sadece şeyle mi alakalı, ürün yönetiminin süreci çok sıkı takip etmesiyle mi alakalı, zaman planına uyulabilmesi?

N: Evet, bence öyle. [21.2] İnsanların resmen birisinin böyle hatırlatmalarına işte nasıl diyeyim yani baskısına ihtiyacı var. Çünkü bir de herkesin günlük olarak yürüttüğü başka işleri – yani seri yeni ürün çıkartmanın dışında başka zorunlu görevleri var – hani performans sistemine girilmiş hedeflerimiz var. Yani birinin bunu bir şekilde hep hatırlatıyor ve yönetiyor, ittiriyor olması gerekiyor.

G: Peki bu sürecin, ürünün tasarım sürecinin iyi işleminde birkaç madde sayacağım, bunların acaba bir etkisi var mı diye şöyle bir yoklamayı istiyorum zihninde: Birincisi birlikte çalıştığın takım arkadaşların; onların çalışma şekli ya da senin motivasyonun üzerinde, bu sürecin iyi işleminde bu ekipteki kişilerin etkisi var mı?

N: Evet, var.

G: Ne yönde? Nasıl oldu?

N: [21.3] İyi ilişkiler ve birbirini iyi anlayabilen insanlar denk geldiğinde kesinlikle problemler de daha hızlı çözülüyor. En azından konuyu sadece iş olarak görüp kişiselleştirmediğin müddetçe, karşıdaki insan da eğer öyleyse daha hızlı ilerliyor. O yüzden bence burada kişilerin de önemi var.

G: Peki iş olarak görüp kişiselleştirmediğinde nasıl yaklaşıyor ürün tasarımı projesine?

N: Yani [21.4] mesela işte beklentileri, zorladığındaki verdiği karşılığını, ona yapılmış olarak kasti herhangi bir zorlama olmadığını düşünerek olumlu bir şekilde geri dönüyor ama zaman oluyor ki kişiden kişiye veya insanın duygusal durumuna göre değişen şeyler oluyor ve bu zorlamaları bu zaman kısıtı içerisindeki baskıları insanlar bazen kişisel olarak algılayabiliyor. O zaman işler daha çok çıkmaza giriyor. Bu şeylerde çokça yaşanıyor, hep zamana karşı yarıştığımız için ve herkesin başka işleri de olduğu için bazen bunlar bu şekilde algılanıyor. Böyle algılanmadığı müddetçe çok daha net gidiyor yani her şey.

G: Bu projede daha olumluydu diyorsun o açıdan değil mi? Kişisel algılanmadan işe odaklanıp yürütebildiniz.

N: Evet.

G: Tamam, peki tasarım ekibinin yapısı hani hepsinde aynıydı değil mi? Bu sistem hep aynı işliyor tüm projelerde doğru mu? Anlattığın sistem.

N: Evet, aynı.

G: Peki birlikte çalıştığın kişilerin durumları, ruh halleri, konuya yaklaşımı da etkiliyor dedin ya, birlikte çalıştığınız kişiler projelerde hep farklılaşıyor mu?

N: Şöyle, mesela ürün yöneticisi değişebilir. Çünkü orada da, o ekipte de birkaç kişi çalışıyor. Bu yıl benim projemi ben oradaki bir ürün yöneticisiyle yürütüyorsam, önümüzdeki yıl diğer ürün yöneticisiyle o projeyi yürütüyor olabilirim. Aynı şekilde

işte biz kendi içimizde de 3 mühendisiz. Herkes bir proje alıyor. Her ürün yöneticisi de bir proje alıyor. Ama tasarımcı hep aynı. Tasarımcı, mobilya tasarlayan kişi tek.

G: Peki ekipler nasıl kuruluyor? Bir proje verileceği zaman ben bir proje seçiyorum, ürün yöneticisi bir proje seçiyor dedin ya, sizin inisiyatifinize mi bırakılıyor, dağıtılıyor mu, nasıl oluyor?

N: ... oluyor, bazen itirazlar oluyor.

G: Arada sesin kesildi de bunlar size assign edilen görevler gibi mi oluyor? Şu projede çalışacaksın gibi?

N: Yönetici, müdür yani, neyi veriyorsa, hangi projeyi veriyorsa onu alıyorsun ama bazen itirazlar oluyor yani. Zaman zaman benim de itiraz ettiğim, hayır ben onu değil öbürünü almak istiyorum, ya da işte önümüzdeki yıl bana böyle bir proje vermeyin, bana şöyle bir proje verseniz dediğim benim de oldu mesela.

G: Nasıl karşılık buluyor?

N: Onlar da dikkate alınıyor. Yani mümkün olduğunca mesela diyelim ki ben geçen yıl orta segmente hitap eden bir proje yaptım, onun dışında da şeyler yaptım daha çok böyle ...dediğimiz işte ona renk ekle bunun tezgahını değiştir, şunun çekmece kutusunu lakeden mdf lama dönüştür gibi bir sürü proje yaptım. [21.5] Ben şey dedim, önümüzdeki yıl ben kendime de yeni bir şey katacağım bir proje istiyorum. Daha zor bir proje olsun – upsegment projeler genelde daha zor olur – öyle bir proje istiyorum dedim. Bu dikkate alındı mesela şimdi bana upsegment bir proje verildi.

G: Peki o başarılı olan proje upsegment olan mıydı?

N: Değildi, o orta segment ürünü.

G: Tamam.

N: Nitelikli bir projeydi ama işte arada değiştirmekte fayda var çünkü parametreler farklı oluyor, beklentiler farklı oluyor, herşey bambaşka oluyor her segmentteki üründe. Yani bu mesela şöyle: [21.6] ben muhtemelen seneye şunu diyor olurum ‘ben

biraz da eco segmentteki ürünlere gireyim' diyor olurum yani. Herkesin böyle bir beklentisi oluyor, değiştirmek istiyor herkes.

G: Peki çalıştığın projeye ilgili ben bu projeyi istemiyorum dediğinde ya da herhangi biri dediğinde nasıl bir karşılık buluyor?

N: Yani bu yıl bunu yap, önümüzdeki sene sana şunu veririz deniliyor yani (güler).

G: Değiştirmiyorlar yani?

N: Genelde değişmiyor ama mesela biz hani kendi aramızda eğer böyle bir konu olursa o birazcık dediğim gibi insani ilişkiler boyutunda yürüyor. Biz kendi aramızda değiştiresek, kimse bize niye değiştirdiniz demez.

G: Öyle mi, e o güzelmiş, en azından bir açık kapı var. Peki, bu projenin yönetim biçimi, projenin başarısını zamanlamayı takip etmeyi açısından önemli dedin değil mi?

N: Evet, evet.

G: Başka proje yönetimine dair söylemek istediğin bir şey olur mu? Proje yönetiminin şu yaklaşımı işin iyi yürütmesine yardımcı oluyor diyeceğin?

N: Ürün yönetiminin diyorsun değil mi?

G: Yani ben proje yönetimi demiştim ama sizdeki karşılığı ürün yönetimi anladığım kadarıyla.

N: Evet. Şöyle, işin hızlanması adına onların bize vermesi gereken bazı bilgiler var mesela. Örneğin yıllık tahmini satış adedi, ortalama beklenen maliyet gibi. Bunlar da önemli. Bizim işimizi doğru ve hızlı yapabilmemiz için mesela bu detaylar da önemli. Bu detaylar gelmediğinde, mesela adet şunun için önemli, satın almaya diyoruz ki biz, yıllık şu kadar adet satılacak, sen ona göre tedarikçinle baştan konuş, ona göre bir fiyat al. Maliyet hesabı yapıyoruz her prototipte. Bunu sunuyoruz her prototip toplantısında, dolayısıyla mesela bunun gibi ürün yönetiminin de bizimle paylaşması gereken bazı bilgiler var. Çok önemli yani malzeme seçimini etkiliyor mesela.

Malzeme seçimi demek de aslında ürün geliřtirmenin temeli demek. Eđer ben, o bana adet bilgisi ve fiyat bilgisi vermezse, örneđin en pahalı firmadan en pahalı malzemeyi seçerek, ya da en ucuz firmadan en ucuz malzemeyi seçerek yapabilirim. Ama aslında onun beklentisi öyle deđildir. Sonra ben tekrar yeni bir malzeme arařtırmasına, yeniden onun numunesinin gelmesini beklemek ve tekrar onunla ilgili prototip yapmak zorundayım.

G: Peki bu bilgiyi size vermek zorunda deđiller mi?

N: zorundalar elbet ama bazen tabiki aksamalar oluyor. İřte onlar da kendi piyasa arařtırmalarında gecikiyorlar, iřte bunları yerine tam olarak yerleřtirmede güçlük çekiyorlar. Öyle olunca gecikiyor bu bilgiler. O arada proje zamanı iřlemeye bařlamıř oluyor, sonradan veriyorlar. Bazen böyle řeyler de yařanabiliyor.

G: Anladım. Peki, senin içinde çalıřtıđın kurumun kurumsal yapısı, kurum kùltürü, tasarım yaklařımı bu süreçlerin iyileřtirilmesinde, daha iyi, verimli yürümesinde etkili mi?

N: Kesinlikle etkili. Genel anlamda zaten tasarıma çok önem veren bir firma. Çok kaynak da sađlıyor bununla ilgili.

G: Nasıl?

N: Tasarımla ürün geliřtirme çok bütünleřik aslına bakarsan. Çünkü yani [21.7] inovasyon merkezi var mesela. Oraya çok yatırım yapılıyor. Her türlü deneme, yeni ürün, bunların yapılması için çaba sarf ediliyor. Ne kadar yani %100 böyle her řey harika iřliyor gibi bir durum tabi ki yok ama zaten yeni bir inovasyon merkezi. Ama genel anlamda firma zaten çok önem veriyor. Yani dolayısıyla evet katkı sađlıyor firmanın kurumsal yapısı. Geçmiřten gelen tecrübeleri var, zaten tasarımın deđerli olduđunu onlar tecrübe etmiřler. Dolayısıyla da önemseniyor.

G: Peki sana kiřisel olarak nasıl yansıyor, sen bu firmada çalıřıyor olmakla alakalı ne hissediyorsun?

N: E tabi prestijli bir řey yani hani sosyal bir řey vardır hani birazcık da olsa

hepimizde. Yani [21.8] ben kişisel olarak çok açıkçası nerede çalıştığını çok önemseyen bir insan değilim. Çok alakasız yerlerde de çalıştım çünkü çok iş değiştirdim. Tabiki sosyal anlamda bir prestij sağlıyor. Nerede çalışıyorsun sorusuna cevap verdiğinde bilmeyen hiç kimseyle karşılaşmıyorsun bir defa. Aa orada mı çalışıyorsun, aaa reklamı gördük falan gibi böyle hani bunlar bile insanı motive ediyor açıkçası. [21.9] Mesela benim üzerinde bir yıl boyunca çalıştığım bir ürünün televizyon reklamları çıktığında tabi ki çok mutlu hissettim yani. Motive edici bir şey bu.

G: Bunun içinde çalıştığın firmanın adının bilinirliğinden başka tasarıma verdiği değer, kıymet veriyor olmasının etkisi var mı? Yoksa marka değeriyle mi alakalı sadece?

N: ya insanlar da, yani son kullanıcının ne düşündüğüyle ilgili mi anlamadım?

G: Yok, şey diyorum, senin, etkiliyor tabi ki bu firmada olmak, herkesin bildiği, marka değeri yüksek bir yerde çalışıyorum dedin ya, bu sadece firmanın marka değeriyle mi alakalı, firmanın tasarımcıya yaklaşımıyla da mı alakalı?

N: Aynen öyle. [21.10] Bir defa şöyle bir şey var: ben mesleğim açısından endüstriyel tasarımcı olarak baktığımda kesinlikle endüstriyel tasarımcıya değer veriliyor, dediğim gibi yani farklı pozisyonlarda endüstriyel tasarımcı istihdam eden bir şirket. Onun ötesinde evet [21.11] tasarıma verdiği değer de beni motive eden ve önemsemiğim bir şey, çünkü nasıl beni etkiliyor: bir tasarım departmanı var, bir ürün yönetimi var, işte bir şekilde doğru bir karar verilerek, doğru şey için ben çalıştırılmaya uğraşılıyorum. Yani şöyle gelinmiyor bana: sen bir şey tasarla ve onu aynı zamanda geliştir, onu aynı zamanda üret diye bir şey yok. Yani tasarımcının, tasarım yapması gerektiğine inanarak yola çıkıyoruz. Ve ben gerçekten değer katılmış bir ürünü aslında gerçek hayata dönüştürmeye çalışıyorum. Ve böyle tabi ki daha güvende hissediyorsun kendini. Ne yaptığını bilerek ilerlediğini hissediyorsun. Bir bilinmeze yapmıyorsun yani, o anlamda tabi ki önemli yani benim şahsi olarak da etkiliyor.

G: Yani şunu düşündürdü bana söylediğin: hani kendini de aynı zamanda geliştirmene, üstüne koymana yardımcı olan süreçler yaşıyorsun?

N: Tabi, evet, kesinlikle.

G: Peki, farklı sektörlerde de çalıştın ya, sektörel olarak banyo mobilyası tasarlıyor olmak, yani bu sektör nasıl sence? Sektör de iyi süreçler yaşamanızı destekleyen bir konu olabilir mi?

N: Yani tabi şimdi ben böyle ne bileyim bi küçük ev aletleri tasarlamadığım için ya da otomotiv sektöründe çalışmış olsam belki konuya daha farklı bakardım ama işte bir profil tasarlamakla banyo mobilyasının ya da işte ürün geliştirme sürecinin içinde olmak çok farklıymış. Neden? Mesela tasarladığın profili son kullanıcı eline alıp herhangi bir ürün olarak kullanmıyor. Banyo mobilyası çok hayatın içinde ve son kullanıcının birebir kullandığı bir ürün. Dolayısıyla evet yani ürünün de aslında etkisi var. Ürünün bu olmasının da etkisi var. Herkesin evinde banyo var.

G: Yani son kullanıcıya ulaştığı için önemli sende değil mi?

N: Evet.

G: Yani onun geri dönüşünü de alabiliyorsun.

N: Çok hızlı alınıyor. [21.12] Bir de herkes kullanıyor. Yani çocuk da kullanıyor, yaşlı da kullanıyor, büyük de kullanıyor, cinsiyeti yok, kadın erkek herkes kullanıyor. Dolayısıyla yani bu da çok önemli, atıyorum bir mutfakta mesela mutfak mobilyası aslında çok yakın görünüyor olmasına rağmen onda kadın daha baskındı. Ya da mesela o, müşterinin kendi talebiyle şekillenen bir bitmiş ürün oluyordu. Yani mutfağı modül modül tasarlıyorsun evet tasarımcı olarak ama aslında ortaya çıkan sonuç, o kullanıcının tasarımı aslında.

G: Bireyin, bir kişinin bir de?

N: Evet, yani o nasıl istiyorsa öyle şekillendiriyor onu. Ama banyo mobilyası öyle değil yani net olarak hiçbir mobilyayı tamamlayıp, tasarlanıyor, ediliyor, üretiliyor ve

son kullanıcıya direk o şekilde gidiyor.

G: Söylerken bile yüzündeki ifade daha mutlu oluyor sanki, anlatırken.

N: Yani zevkli bir konu aslında, tasarım kısmında da daha fazla olmak da isterdim açıkçası. Yani orası da farklı bir bakış açısı diye düşünüyorum. Ürün yönetimi kısmı da bambaşka bir bakış açısı.

G: Peki, şimdi bu iyi yürüyen disiplinler arası tasarım sürecinde, senin, yaptığın işten en çok haz almanı, zevk almanı, en çok motive olduğun an'ı sağlayan bir olay, birinin bir tavrı, bir şey hatırlamaya çalışsan, hani seni çok aşka şevke getiren, konsantrasyonunu ona vermeni sağlayan, keyifle işini yapmanı sağlayan bir şeyler varsa onları hatırlamaya çalışır mısın?

N: Mesela sürecin içerisinde şey bana çok keyif veriyor açıkçası: mesela [21.13] yeni bir malzeme bulmuş olmak, denemiş olmak, bu benim için çok heyecan verici bir şey. Mesela performans hedefleri konurken ben özellikle talep ediyorum yani bunların olması ve bunlar için bize zaman tanınması konusunda. Bu çok haz verici bir şey benim için. [21.14] Yurt dışında bir şey görüyoruz mesela, onun ne olduğunu arıyoruz arıyoruz, adını bilmiyoruz, bir şey bilmiyoruz ama onu bir şekilde buluyoruz, o geliyor. O paketi bile açarken içinden çıkacak şeyi ilk elimize alıp aa bak geldi falan işte şöyleymiş, böyleymiş diye baktığımız an bile çok keyif verici. Ama [21.15] sürecin sonunda da asıl güzel tarafı şu: başarıyla bir ürün çıktıysa, zamanında fotoğraf çekimleri yapılıp, fotoğraflar gelmeye başlıyor. Arkadaşlar bize işte whatsapp gruplarından atmaya başlıyorlar, işte o zaman diyorsun ki ay ne güzel yaa, işte bitti, gerçekten oldu, orada işte birileri hikayeden de olsa o ürünleri kullanıyor. Fotoğraflanıyor, biliyorsun onlar bir yerlere ulaşacak, o an gerçekten güzel, keyifli bir an.

G: Peki şey dedin ya, ürün yönetimi sürekli seni dürtmesi lazım, hatırlatması lazım falan, onları söylerken biraz daha olumsuz kelimeler kullandın, hani sürekli sanki bir baskı hissediyormuş gibi, o olumsuz bir his mi yoksa bu aslında kamçılıyıcı, aşka getiren bir his mi?

N: Yani biraz olumsuz bir his yaratıyor ama yapacak bir şey yok işte. Hep böyle olumlu motivasyonlarla olmuyor yani ne yazık ki. Bazen, yani baskı dozunda olursa kamçılayıcı bir şey oluyor açıkçası. Dozunda olabilmesi için de herkesin zamanında aslında işini yerine getiriyor olması gerekiyor. Stres biraz tadında olursa iyi bir şey yani hiç stressiz de bence ...olmuyorsun ama onu yapmalıydım, yetiştirmeliydim, o heyecanın içine kapılıp gitmiyorsun. Birazcık baskı, birazcık stres, dozunda olmak kaydıyla – farklı şirketlerde ben çok fazlasına da maruz kaldım – güzel bir şey.

G: Anladım. Peki şimdi

N: [21.16] O anki ruh halin tabi ki of ya işte yüküm çok ağır, omuzlarımda yük var oluyor ama tabi ki onu yapıp bir adım koydukça, yapıp bir adım üstüne koydukça giderek tabi ki daha fazla artık mutluluk seviyen, haz seviyen artıyor.

G: Yani, şöyle bir şeyle karşılaşıyor musun, mesela hani gerçekten tıkanıp kaldığında – gerçi o tıkanıp kalmayı sonra konuşalım, konuyu dağıtmayım ben, onu ileride soracağım çünkü. Peki, şimdiye kadar tecrübe ettiklerin arasında sorunlu gördüğün, çok da sağlıklı işlemediğini düşündüğün bir proje var mı?

(Kısa bir sessizlik)

G: Ya da çok sekteye uğrayan, sürecin tamamında olmak zorunda değil ama çok da iyi yürümediğini düşündüğün

N: Evet, var.

G: O projeye ilgili, neden sorun vardı onda, neden çok da iyi işlemedi süreç, onu anlatır mısın?

N: Anlatayım. Şöyle ki: onda da mesela benzer, yani az önce aslında dedim ya tasarımdan ve ürün yönetiminden hızlıca net bir şekilde birşeyler çıkarsa çok hızlı yürüyor diye, orada da ürün yönetimi, nasıl bir ürün istediğiyle ilgili ...tam olarak net veremedi ve sonrasında tasarım ekibi bir tasarım yaptı, fakat yaptıkları tasarım uygulanabilir ve o segmentteki malzeme sınıfıyla yapılabilir, üretilebilir değildi. Dolayısıyla [21.20] o tasarımın üstünde bizim, yani benim, ürün geliştirmeci olarak

oyunamalar yaparak deęiřtirmem beklendi. Tabi ki o deęiřikliklerden tatmin olmadılar. Çünkü hani bir yandan da tabi ki departmanların da egosu oluyor yani sadece bireylerin egosu yok. O zaman o, onların tasarımı olmuş olmuyor yani benim müdahalemlerle geliştirilince. Sonra yeniden tasarım yapıldı. Dolayısıyla bu arada çok zaman kaybedildi. Daha çok sıkışmış oldum tabi ki. Böyle süreçler de olabiliyor. Ama n'oluyo, tabi sonunda şöyle olmaya başlıyor: işte artık herkes bir şekilde müşteriye zararı olmayacak şekilde bazı şeylerden feragat etmeye başlıyor.

G: Ne mesela?

N: Yani mesela diyelim ki serinin içerisinde 3 tip lavabo dolabı olacak, ürün yönetimi diyor ki tamam iki tipini çözelim, çıkartalım, sonra ilave olarak bir dięer tipi peşinden çıkartırız.

G: Zaman daraldığı için mi?

N: Hıhı zaman daraldığı için.

G: Anladım.

N: Ya da işte mesela malzeme bulma konusunda zaman daraldığı için zorluk yaşıyoruz. Tasarım departmanı diyor ki tamam peki o zaman işte bulduğum şu malzemelerle çıkartalım. Sonra ilave bir malzeme daha bulup ekleriz diyor. Mesela o proje için şimdi yeni bir malzeme seçiyoruz, o geçen yıl çıktı – yani 2018'de çıktı ürün – 2019 için ona ilave bir malzeme bulacağız. Yani bu tür esnetmelere gidiyor departmanlar birbirinin işini kolaylařtırmak için. Ama tabi her zaman bunlar böyle pamuklar içerisinde falan da olmuyor tabi ki (güler) tartışmalar, mailler, siz geç gönderdiniz, biz vaktinde yaptık, hayır siz de şunu şu zamanda yapmadınız gibi şeyler oluyor. Ama ürün geliřtirmede de mesela bazen aksaklıklar oluyor. Mesela beklemediğimiz sonuçlar çıkıyor. Aslında üretimde yapılabileceğini düşündüğümüz ama yapamadığımız şeyler oluyor veya tedarikçiyle bir malzeme çalışıyor oluyoruz, tedarikçi istediğimiz kaliteye gelmiyor, ama o da bizim sorumluluğumuzda aslında, yani onu öngörüp, ona göre bir zaman planı yapmamız gerekiyor. Bazen ürün

geliştirme departmanında da oluyor yani bu tür aksamalar.

G: Peki yine tek tek faktörler üzerinden gitsek, onlarla ilgili olaylar, durumlar hatırlayıp anlatmaya çalışsan daha derli toplu olur, ikimizin de zihni dağılmasın diye. Bu sürecin olumsuz olmasında takım arkadaşlarının tavırları, yaklaşımları ile alakalı bir olumsuzluk yaşadın mı mesela? Birlikte çalıştığın kişilerin etkisi oldu mu bu sürecin iyi olmamasında, sağlıklı yürümemesinde?

N: ya bireysel olarak, kişi olarak değil aslında yani bu da yine bir zincir, bu da bir ekip işi, gecikmesi de bir ekip işi.

G: Peki departman olarak ele aldığımızda mesela dedin ya az önce departmanların da egosu oluyor, bunun gibi olabildiğince örnek durumlar üzerinden, yaşadığın şeyler üzerinden departmanların bu sürece etkisi nasıl oluyor onu anlatabilir misin?

N: Yani şöyle, aslında mesela [21.21] hani ürün yönetimi ürünün sahibi demiştim ya, evet onlar sahibi ama mesela bize her zaman ürün departmanı müdürünün söylediği şöyle bir şey var: siz de onları taciz edebilirsiniz, yani siz de onları baskılayabilirsiniz. Diyelim ki işte şu tarihte gelmesi gerekiyordu proje, neden gelmedi, neden gelmedi, neden gelmedi? Çünkü hani evet sahip onlar ama sonuçta süre kısıtına maruz kalacak olan yine onlar ve biziz aslında. Dolayısıyla biz de tabi ki bir takım baskılarda bulunuyoruz. İşte bu baskılar esnasında insanların birbirleri arasında gerilimler yaşanabiliyor yani hani nasıl diyeyim yani bunlar böyle tabi ki yüksek dozajlı şeyler olmuyor. Eğer gerçekten bireysel olarak bir problemin yoksa kendinle ilgili veya karşındakinin öyle bir problemi yoksa, çok yüksek dozda olmuyor.

G: Bir örnek hatırlayabilir misin? Şöyle olmuştu diye anlatabileceğin bir olay var mı aklında?

N: (düşünür)

G: Yine o ürün, hani çok iyi yürümeyen süreçle alakalı.

N: Tamam. (düşünür). Onda, ya ben çok gerilim yaratan bir insan değilim, o yüzden bilmiyorum, çok da olmadı ama işte oluyor yani bazen. Kızıyorsun, işte niye

yollamadın, işte yollayacağım, ama siz bize gelince sıkıştırıyorsunuz benim zamanım daralıyor falan gibi çok serzenişler üzerine kurulu oluyor benim şikayetlerim.

G: Tamam (karşılıklı gülüşme)

N: Sonra ben sıkışacağım, işte siz bana yardım mı edeceksiniz sanki falan gibi daha böyle insani boyutta şeyler oluyor aslında yani.

G: Ee geri dönüşü oluyor mu peki, sen serzenişte bulunduğunda ya haklısın Nergis diyorlar mı, hemen gönderiyoruz?

N: Oluyor, evet. O konuda şanslıyız ya bizim yani çalıştığımız insanlar – yani en azından şu andakiler – geçen yıl farklı bir ekiple çalıştım onlar da öyleydi – yani ürün yönetimi ekibi – genel anlamda öyle. Dediğim gibi zaman zaman iniş çıkışlar evet oluyor yani tansiyon yükseliyor bazen, ama aynı hızla da düşüyor.

G: Anladım. Peki proje yönetiminin zamanı iyi yönetmek dışında bir etkisi var mı? Hani şöyle olsaydı daha iyi olurdu diyebileceğin, ya da şu sebeple kötü oldu, süreçte aksamalar oldu diyebileceğin?

N: Mesela bu eleştiriyi yapıyorum bazen onlara da: bazen şeyi kaçırıyorlar yani doğru renk seçimini mesela, doğru kullanıcı kitlesini, neleri bilip bilmediğiyle ilgili bilgileri kaçırıyorlar.

G: Tekrar söyleyebilir misin sesin kesildi?

N: Doğru renk seçimi yapmak ya da işte mesela doğru kitlenin doğru ürünle ilgili bilgileri bilip bilmediğiyle ilgili yanlış yönlere gidebiliyorlar. Ama zaten şöyle bir şey var. Tüm bu süreç içerisinde ...dediğimiz bir toplantılar serisi var, daha üst düzey kişilerin de katılımıyla, fikirler 3 fazda değerlendiriliyor ve bu ortamlarda herkes zaten özgürce fikirlerini söylüyor. Bu eleştirileri yapıyoruz, bu da zaten dinleniyor yani en azından rota biraz daha çevriliyor. Yani tabi ki bireysel olarak benim söylediğim bir şeyi yapmaları gibi bir şey olamaz da, ya da başka x bir kişinin söylediği şeyi yapmaları söz konusu olamaz ama genel anlamda rota ona göre değiştirilebiliyor. Bir de ürünler oylanıyor geldiği noktada, tamam mı devam mı diye ...toplantılarında.

G: Oylama sonucuna direk sadık kalınıyor mu tamam mı devam mı noktasında?

N: %70

G: Aksi durumda ne oluyor, nasıl gelişiyor süreç?

N: Yani daha böyle üst düzey birisi bazen hayır olsun diyor (güler)

G: Ve diğerleri de peki efendim diyor (güler) öyle mi?

N: Ya peki efendim demese de şöyle oluyor: deneyimine güveniyorsun. Mesela satışların en üstünde olan bir direktör diyor ki hayır diyor ben inanıyorum bu diyor olacak diyor mesela. %70 uyuluyor dediğim bazen böyle çoğunluk ‘yok ya bu iş yapmaz’ dese de çıkan ürünler oluyor. Ve hakikaten başarılı oluyor.

G: O zaman ikna mı ediyor diğer görüş?

N: Evet.

G: Yani bir ikna var mı yoksa tamam ya bir deneyelim mi?

N: Çoğu zaman tabi ki ikna ediliyor yani çok deneme yanılma şansı yok yani, şeyin, yapının.

G: Peki, bu proje herhangi bir yerde tıkanıldığında, zaman sıkıştığında, işte tansiyon yükseldiğinde bu senin iş performansını nasıl etkiliyor? Etkiliyor mu? Yoksa hemen düşüyor ve olduğu gibi devam ediyor mu dersin?

N: Yok ya beni çok etkilemiyor.

G: Motivasyonunu?

N: Yok, yani çok fazla değil. Çok küçük bir oranda, anlık yani, [21.17] o anda işte tabi biraz böyle of poff, yani oldu mu şimdi, diyip yelkenleri ya da işte nasıl denir kanatların böyle düşüyor ama sonrasında ben çabuk, hızlı bir şekilde konsantrasyonuma kavuşuyorum. Öyle olmak zorunda. Yoksa bu motivasyonu düşürmenin benden başka kimseye zararı yok, çünkü o sıkışıklık benim yüzümden daha da çok sıkışıklık haline dönüşeceği için ben, ama genel olarak hani ben diyorum

ya, ben mesela ekip arkadaşlarım da öyle. Çok mesela motivasyonlarını böyle şeyler için uzun süre düşüren insanlar değil, kopan insanlar değil aslında.

G: Peki, sen motivasyonunu nasıl yüksek tutuyorsun? Yani hani diyorsun ya işte bir an kanatlarım düşüyor ama sonra toparlıyorum, ne seni tekrar toparlayan?

N: Yani bu iş diyorum, yapacağız ve bitecek diyorum (gülür) yani

G: (gülür) kaçacak yer yok.

N: iş bu diyorum yani yapacağız, eninde sonunda öyle ya da böyle bitiyor, çıkıyor ürünler de bir şekilde. İşte bazen mesai yapmak zorunda kaldığımız dönemler oldu, yapıyoruz, yani çok böyle öldürücü şartlar altında çalışmadığımız için - her şeye rağmen - onlara katlanıyoruz. Ben en azından diyorum yani kendime, iş bu yani, yapacak bir şey yok.

G: Peki, yeri gelmişken o zaman iş ortamı - öldürücü şartlarda çalışmıyoruz dedin ya - çalıştığın iş ortamının motivasyonun üzerindeki etkisi nasıl?

N: Çok büyük. Bir kere [21.18] bizim müdürümüz, departmanın müdürü sadece mobilya üretiminin ürün geliştirme müdürü değil, diğer ürün gruplarının da ürün geliştirme müdürü, altında 40 kişi çalışıyor. Dolayısıyla mesela o çok yoğun, işte biz de tabi ekip olarak deneyimli bir ekibiz. En başından beri söylediği şey şu: siz ne diyorsanız doğrudur, sıkıştığınız noktada yumurta kapıya dayanmadan bana söyleyin, yardımcı olmaya çalışırım. Ama onun dışında biz özgürüz. [21.19] Kendi zaman planımızı aslında o makro planlamanın içerisinde bireysel planlamasını kendisi yapan insanlarız. Mesela bu çok rahatlatıcı bir şey. Çok, beni rahat hissettiren bir şey. Onun dışında sürekli olarak yaptın mı, işte günlük olarak mesela ya da saatlik olarak neyi yaptın neyi yapmadın gibi şeyler sorgulanmıyor. İşi tamamladın mı tamamlamadın mı? Bu da güzel bir şey, bu da rahatlatıyor, kendi kendini organize ediyorsun. Zaman konusunda mesela çok şeydir, yani istiyorsan bir saat önce gel, bir saat önce çık işten, çok fazla problem edilmez. Arada bir evden çalışma özgürlüğüne sahibiz, istiyorsak onu kullanabiliriz. Onlar beni rahat hissettiriyor. Onun dışında tabi ki yani sonuçta iş

hayatı, özel sektör yırtıcı. Bu bir gerçek. Bunaldığım ve çok saçma bulduğum şeyler zaman zaman oluyor ama genel anlamda işleyiş, yapı böyle yani. Dediğim gibi bunlar beni rahatsız etmiyor burada ve motive oluyorum bunlarla.

G: Yani başka bir yere de gitsen iş ortamı budur diye bir kabullenmen var değil mi? Özel sektör bu!

N: Evet yani öyle, [21.22] özel sektör böyle. Türkiye’de insanların çalışma mantığı böyle. Çok fazla aday var. Herkes bir çarpışmanın, bir koşturmacanın içerisinde. Özellikle İstanbul’da böyle. Ben Bozüyük’te de çalıştığım için orayı da biliyorum. İstanbul çok yırtıcı. Çok aday var çünkü. Sen olmazsan alternatifin çok. Hoş bu arada çalışan için de orası olmazsa alternatif çok ama o koşturmaca ve şeyin içerisinde bir şekilde bunu kabulleniyorsun.

G: Bu seni kamçılıyor mu, motive mi ediyor demiştin koşturmacanın olması? Yanlış mı anladım?

N: Ya koşturmacanın olması şöyle aslında diyorum ya ben, bu bir kabulleniş. Motive ediyor ya da demotive ediyor diyemem. Ama [21.23] iş ortamının o işte çok fazla üstüne hani gidilmemesi, çok sıkılmaması, bunlar motive ediyor gerçekten beni. Beni bu iş yerinde en çok mutlu eden şey, bunlar.

G: Peki, fiziksel ortam olarak hani mekan olarak bir etkisi var mı?

N: [21.50] Ya daha güzel fiziksel mekanlarda çalıştım. Bizim fiziksel olarak ortamımız harika değil yani ama kendimize ait ürün geliştirmenin bir odası var. Biz orada kendi çekirdek ailemiz olarak çalışıyoruz. Diğer departmanların çok fazla işte diyaloglarına maruz kalmıyoruz. Bu da güzel bir şey, daha izole çalışma şansımız var. Çünkü bizim biraz izole olup böyle sakin kalmamız gereken zamanlar oluyor. O yüzden ortamın o ayrı olması, açık ofis olmaması – diğer departmanlar açık ofiste çalışıyor çünkü – o da güzel bir şey. Ama yani benim ortamla ilgili böyle – daha güzel ortamlarda çalışıp daha mutsuz olduğum zamanlar olduğu için – çok sorunum yok açıkçası yani, temiz olması yeterli (güler).

G: Peki ürün geliştirme izole, diğerleri açık ofiste çalışıyor dedin ya, onu şirket bilinçli olarak mı böyle yerleştirmiş, nasıl bir yerleşim olmuş, bunun sebebi ne, sen nasıl açıklıyorsun bu gerekçeyi?

N: Zaten şirkette genel bir bilgi güvenliği var, o aşılınmaya çalışılıyor. Ya işte geçen bi gittim, benim masamda üzgün surat vardı. Masamda mesela çizimler falan bırakmıştım ben. Onların olmaması gerekiyor. [21.51] Bilgi güvenliği eğitimi falan veriliyor işte bilgisayarların mutlaka kilitlenmesi gerekiyor falan böyle işte. Onun ötesinde ürün geliştirme departmanı geceleri kapısı kilitlenen bir departman. Yani oradan sonuçta yenilikler çıkıyor. Bu yüzden biraz daha izole olması kasıtlı olarak yapılmış bir şey.

G: Güvenlik açısından yani, o yeni üretilen bilginin saklanması için.

N: Tedarikçiler geliyor mesela, açık ofis üst katta, toplantı odaları var. Oralarda insanlarla merhabalaşıyorlar, sohbet ediyorlar, onlarla daha kamusal bir alanda zaman geçiriyorlar. Mutfak var, açık bir mutfak var orada çalışıyorlar falan hani bir diyalogları oluyor. Ama bizim odaya mesela genelde biz çok böyle hani gizlilik anlaşması falan yaptığımız tedarikçilerle falan toplantı yapıyoruz. Onun dışındakileri mesela biz de üst katta o diğer açık ofisin olduğu kısımda falan ağırlıyoruz.

G: Senin şahsi olarak izole olması, daha izole olmamız ve kendi içimizde kalmamız gerekiyor dedin ya, bilgi güvenliği dışında gerekçesi ne bu çalışma şeklinin?

N: Yani çünkü bizim o çözmemiz gereken detaylar, kafa yormamız gereken bir takım şeyler oluyor. O yüzden de o izole ortam daha sağlıklı geliyor bana.

G: Konsantre olmak açısından mı?

N: Evet.

G: Peki, tüm bu süreçlerde, herhangi bir çatışma doğduğunda senin bu çatışmaları çözmekle alakalı kullandığın bir yöntem, geliştirdiğin bir yöntem var mı? Sorun çıktığında ne yapıyorsun?

N: Ya ben genelde eğer çok böyle damarıma basılacak bir şey yoksa, o anda tartışıyorsak bile akabinde tekrar, biraz sakinleştikten sonra tekrar konuşarak çözen bir insanım. Ama bazen çok damarıma basıldığında, daha resmi yollarla çözmek adına mail üzerinden ilgili diğer üst veya aynı pozisyondaki insanları da maile ekleyerek, konunun açıklığa kavuşturulması gerektiğini falan yazarak, çözümler de uyguladığım oluyor ama ağırlıklı bunu ben yani 5 problemde birinde falan ancak bunu böyle yapıyorumdur. Ya da belki daha az yani. Daha çok kişisel böyle hani iyi niyet çerçevesinde çözmeyi ben tercih ediyorum.

G: Damarıma basıldığı nokta dediğin ne mesela? Örnek verebilir misin?

N: Yani birkaç kez aynı konu üzerinde tartışıp tartışıp hala daha bir çözüm ya da bir cevap alamıyorsam mesela.

G: O zaman, yanlış mı anladım, mail atıyorsun kişiye, maile de üst..

N: Daha yetkili, onun da ona bir şekilde bu soruyu soracağı kişileri ya da aynı pozisyonda kişiler bile olsa fikrini alarak, biz bununla bu sorunu çözemiyoruz ama sen de fikrini söyle diyeceğim insanları da koyuyorum. Mesela şöyle şeyler olabiliyor mesela kızıp yüzüne telefon kapatanlar oluyor bazen. Konuşurken konuşurken sinirlenip, mesela onlara benim tahammüllüm yok. Öyle olduğunda ben de böyle karşılık veriyorum. Ama onun dışında hani iki taraf karşılıklı böyle bir takım tansiyon yükselip böyle inip çıktığında, çözüme ulaşamamak bile bir süre sonra sakinleşip, tekrar konuşmayı deneyerek ben daha çok çözüyorum.

G: O zaman aslında yüzüne telefon kapanması dedin ya hani bu, konu kişiselleşmeye başladığı noktada ürettiğin çözüm herhalde. Çözüm oluyor mu?

N: Evet.

G: Tamam. (gülerler)

N: Ne yazık ki.

G: Peki, şimdi bu deneyimlerinden sonra, hem bireysel olarak yürüttüğün tasarım

süreçleri var – daha küçük gruplarla diyelim ya da – ve şimdi daha kalabalık ekiplerle çalışıyorsun, bu tasarım kariyerin boyunca disiplinler arası tasarım süreciyle alakalı senin süreci nasıl anladığın, nasıl değerlendirdiğin ya da yürüttüğünle alakalı zihninde nasıl bir düşünce oluştu? Sen nasıl yaklaşıyorsun bu konuya, disiplinler arası tasarım sürecinin yürümesine dair?

N: Şöyle, açıkçası bazen bu kadar çok insanın bir araya gelerek çalışmasının, zamanı boşa harcamak olduğunu düşündüğüm anlar oluyor.

G: Bu firmada oldu değil mi bu?

N: Hıhı, evet. Ama sonra dönüp baktığımda, mesela proje bitip, geriye dönüp baktığımda, aslında öyle olmadığını düşünüyorum her seferinde. Yani o an'ın içinde yaşarken, çok kalabalık ekipler – ürün yönetimi dediğimiz ekip en az 3 kişi; tasarım ekibi dediğimiz 2 kişi; işte ürün geliştirme 3 kişi; o 2 kişi; o 5 kişi falan – böyle ekipler bir araya geliyor. Ve tabi ki herkesin söyleyecek bir şeyi olduğu için, çok zaman alan şeyler yapıyoruz. Bunları yaşarken hep şöyle oluyorum: yani bu kadar kalabalık değil de daha böyle bi çekirdek kadrolar olsak daha mı iyi olur acaba falan diye düşünüyorum ama sonra dönüp baktığımda geriye, diyorum ki yok hayır aslında bu proje için böylesi iyiymiş diyorum.

G: Neden?

N: Şunun için: [21.24] biz orada sonuçta tabi ki profesyonel olarak, meslek olarak her birimiz bakmaya çalışıyoruz ama ister istemez aslında bireysel, son kullanıcı olarak da fikirlerimiz şekilleniyor. Ne kadar çok insan orada bulunup fikir verecek olursa, aslında o kadar daha gerçek fikirlere ulaşma ihtimalimiz daha çok. Dolayısıyla da her bir araya gelindiğinde farklı farklı insanlardan farklı farklı fikirler çıkmış oluyor. Bunların her biri masaya yatırılıyor, bazen bazıları çok saçma bulunuyor, bazen çok uç ama aslında niye olmasın deniyor. Dolayısıyla bence farklı gözlerle farklı alanlardan insanlar yorumlar katıyor.

G: Peki sence alternatiflerin böyle çoğalmasında sorun yaratan bir şey mi yoksa verimli

bir şey mi?

N: Yok, diyorum ya [21.25] o an onları yaşarken hep bir zaman telaşı içerisinde olduğumuz için yani uf çok fazla bunlar falan, gerek yok bu kadar diyoruz ama aslında öyle değil. Yani nihai ürün çıktığında onların hepsinin bir değer kattığının farkına biz de varıyoruz, öyle söyleyeyim.

G: O zaman kalabalık bir ekibin faydalı olduğunu düşünüyorsun şu an hala.

N: Hıhı, kesinlikle.

G: Peki, şimdi biraz konudan uzaklaşıyoruz, sona yaklaşıyoruz. 5 yıl içerisinde kariyerinde kendini nerede görüyorsun, nasıl bir şirket, nasıl bir pozisyon, çalışma ortamı, ne hayal edersin?

N: Açıkçası ben çalıştığım şirkette çalışmaktan mutluyum. O yüzden önümüzdeki 5 yıl içerisinde çok fazla şirket değiştirmek gibi bir fikrim yok. Burada yükselmek istiyorum açıkçası. Ama tabi ki kurumsal hayat her zaman istediğin gibi gitmiyor, o yüzden ne olur önümde bilmiyorum, farklı, başka fırsatlar önüme çıkarsa tabi ki değerlendiririm. Hem pozisyon anlamında hem de işin niteliği anlamında daha iyi fırsatlar çıkarsa karşıma, daha iyi maddi koşullar karşıma çıkarsa da değerlendirebilirim. Ama burada da açıkçası farklı departmanlarda olmak da güzel geliyor kulağıma. Mesela dedim ya daha önce de bir ürün yönetimi tarafından konuya bakmak da isterim açıkçası, ya da işte tasarım tarafından da bu tarafa doğru bir bakmak isterim yani. O iki departman benim için daha böyle sıcak duruyor.

G: Bu firmada hep ürün geliştirme mühendisi olarak mı çalıştın?

N: Evet.

G: Peki, diğer departmanlarda çalışman ya da yükselmen nasıl bir prosedür bu firmada? Performansla mı alakalı?

N: Şöyle, [21.26] yükselme performansla alakalı mı ondan tam emin değilim açıkçası, performansım iyi ama 3 senedir herhangi bir terfi almadım. Biraz daha bence kişisel

ilişkiler yatıyor altında. Bu da işte dediğim gibi bence özel sektörün ne yazık ki bir çaresizliği mi diyeyim ne diyeyim, böyle yani, böyle işliyor. Ama departman değiştirme konusu şöyle: şirketin içerisinde uygun pozisyonlar herkese açık ilan olarak yayınlanıyor. İsteyen oraya başvurabiliyor. Eğer başarılı performans dönemleri geçirdiyse son iki yılda, başvurabilirsin. Karşı taraf seni aday olarak görüp seninle görüşürse ve kabul ederse, bölüm, kendi departmanının yöneticisine de iletiyorsun, biraz daha böyle iyi niyet çerçevesinde iş devri gibi şeyler yapılarak departmanlar arası geçişler de yapılabilir. Ya da mesela ben yükselmek istiyorum, bunu da işte belirttim yöneticilerime, söyledim. Başka bir departmanda yöneticilik pozisyonu açıldı ve benim onu yapacağıma inanıyorlarsa tavsiye de ediyorlar. Yükselerek oraya da geçebiliyorsun, böyle insanlar var. Ama bunu ben başarabilir miyim göreceğiz.

G: Bunun için bir stratejin var mı?

N: Yani bunun için şöyle bir stratejim var: zaman zaman yükselmek istediğimi tekrarlamak, hatırlatmak bireysel görüşmelerde.

G: Yani, ikili ilişkilerin çok etkisi olduğunu düşünüyorsun zaten.

N: Öyle. Zaten bunu da reddetmiyor kimse bu arada. Evet diyorlar yani gerçekten böyle.

G: Kurum kültürü.

N: Evet.

G: Peki, konuşmadığımız bir konu var mı sence disiplinler arası tasarım süreciyle alakalı? Değınmediğimiz bir şey?

N: Yok sanıyorum.

G: Senin bana sormak istediğın bir şey var mı, çalışmayla alakalı? Bu çalışma kişisel deneyimlerle alakalı tamamen, firmanın ismi bu süreçte yer almayacak. Zaten firmaya odaklanmadığımız için, çalıştığın bir çok yerle ilgili deneyimler konuştuğumuz için..

N: Şüphem yok bir kere, bir de anlattığım hiçbir bilgi çok gizli bir bilgi değil.

Dolayısıyla aklımda herhangi bir Őüphem yok. BaŐarılar, inŐallah kısa zamanda toparlarsın.

G: TeŐekkürler. Peki bu tez konusu üzerinde gÖrüşme yapabileceğim başka kimse önerebilir misin bana?

C. Initial Template

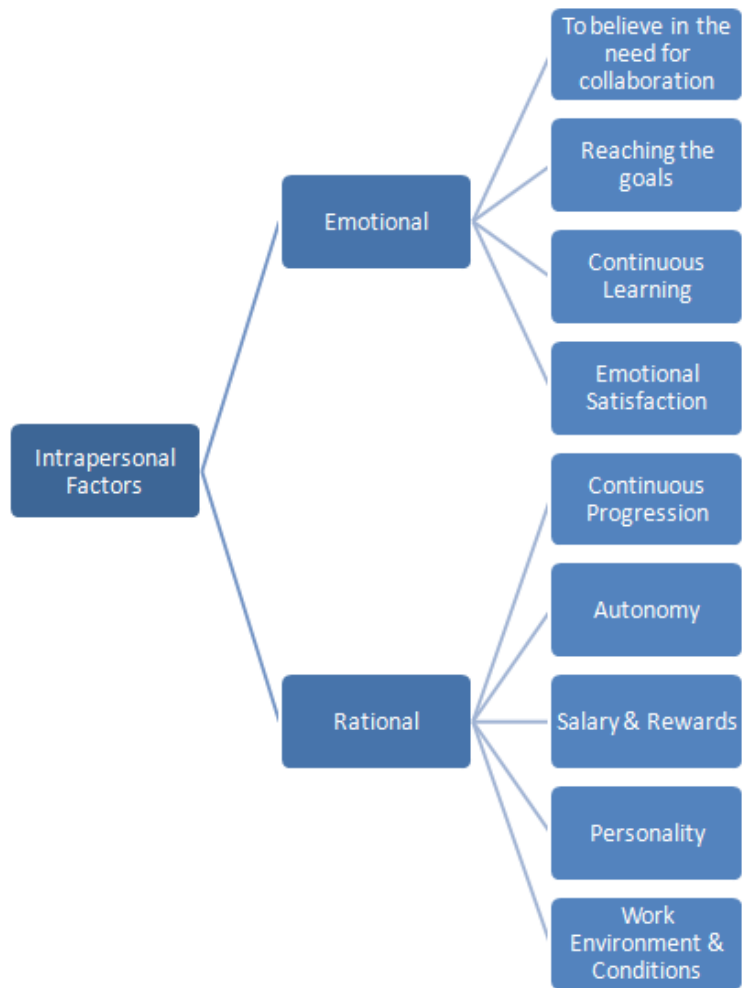


Figure 0.1. Intra-personal factors that trigger passion towards collaboration and the task at hand

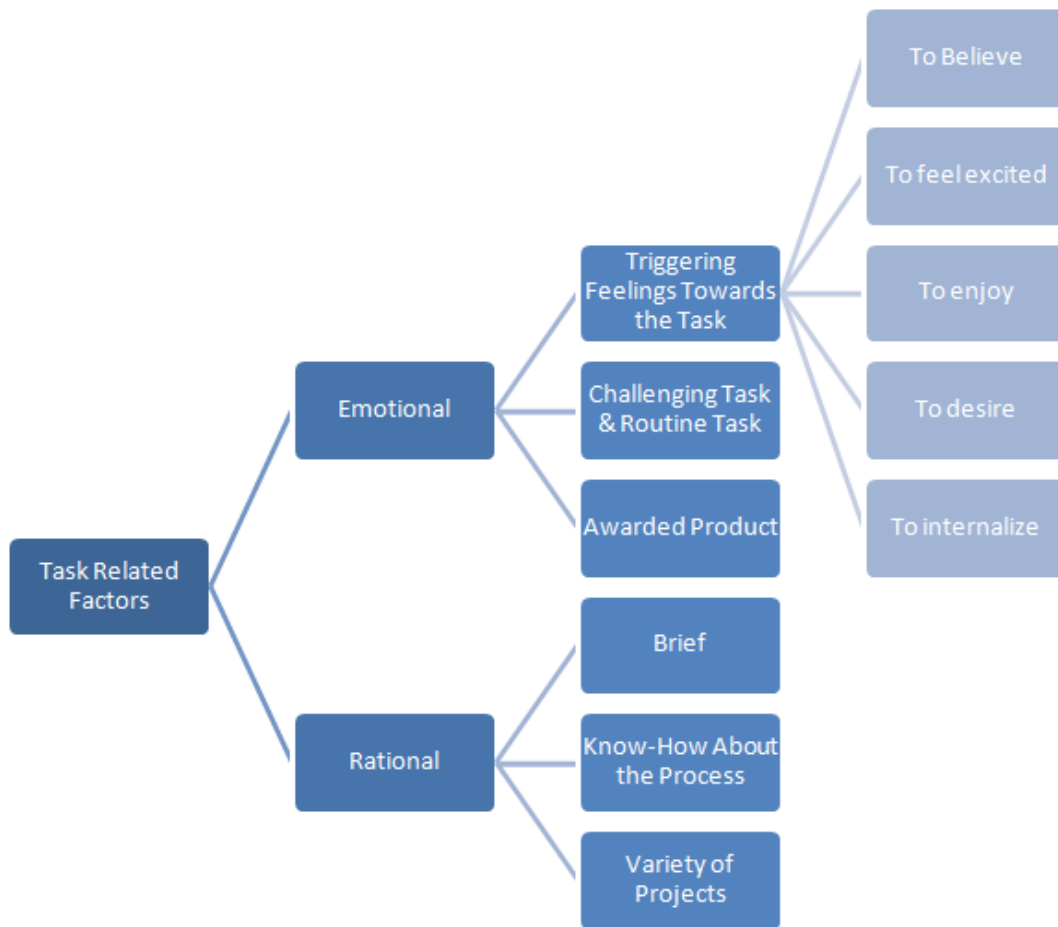


Figure 0.2. Task-related factors that trigger passion towards collaboration and the task at hand

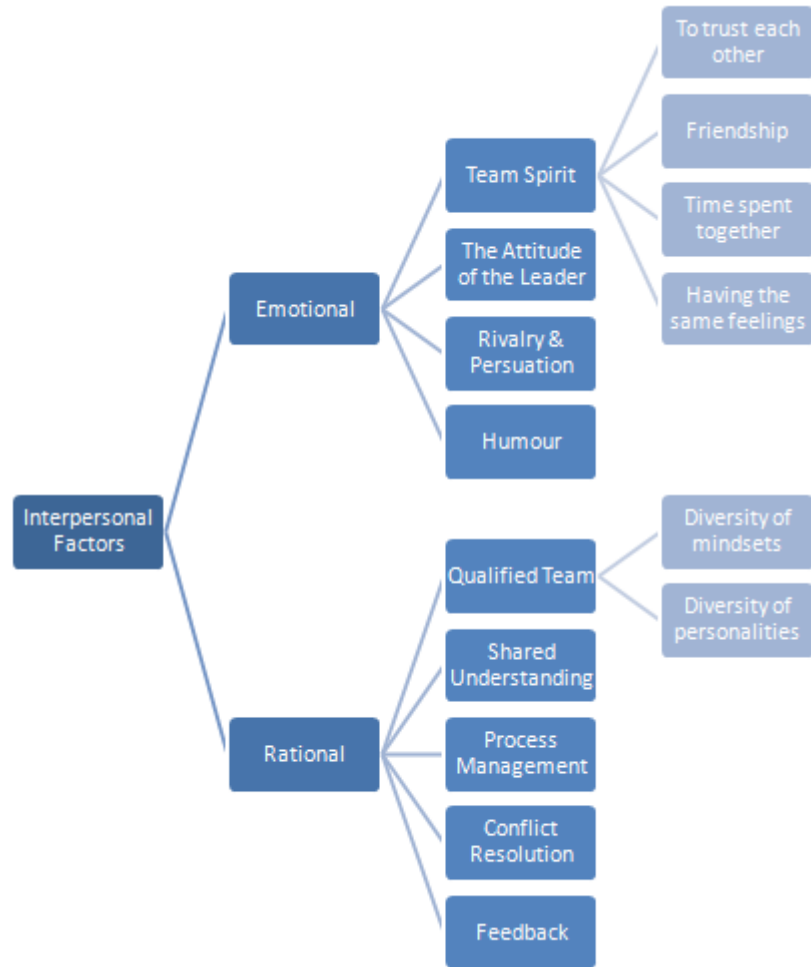


Figure 0.3. Inter-personal factors that trigger passion towards collaboration and the task at hand

D. Revised Template

Passion		Purpose		Pleasure	
related factor	quote	related factor	quote	related factor	quote
Aşk		Marka bilinirliğini artırmak		Görünür olmak	
İnanmak		Communication		Özgüven	
İnanmak		Zaman		Süreç yönetimi / Sonuç görmek	
İnanmak		Öğrenme		Prestij	
Sahiplenmek		Öğrenme		Aidiyet/Sahiplenme	
Heyecanı aktarmak		Kariyer		Ürünü piyasada görmenin hazzı	
Milliyetçilik		Kariyer		Pozitif geribildirim	
Özel proje		Kariyer		Sürekli ilerleme	
Hatadan öğrenme		Sonuç görmek		Öğrenme	
Yönetici		Yöneticinin Tavrı		Takdir edilmek	
Yönetici		Yenilik		Ürünü piyasada görmenin hazzı	
Heyecanı aktarmak		Feedback		Ürünü piyasada görmenin hazzı	
Heyecanı aktarmak		Katılım		Ürünü piyasada görmenin hazzı	
Heyecanı aktarmak		Aynı dili konuşmak		Fark edilmek	
Heyecanı aktarmak		Takim ruhu oluşturmak		Rutin işler	
Sonuç Odaklılık		Yenilikçi işbirliği		Fark edilmek	
Sonuç odaklılık		Yöneticinin Tavrı		Önemsenmek	
Detaylara önem vermek		Yöneticinin Tavrı (Patron)		Aidiyet	
Risk almak		Hızlı karar vermek		Yapıcı eleştiri	
Heyecanı aktarmak		Yöneticinin Tavrı		Yapıcı eleştiri	
nitelikli takım kurmak		Soru Sormak		Öz farkındalık	[29.4] Farklı mıyim? Vallahi farklıyım
Hatadan öğrenme		Nitelikli takım kurmak		Mizah_Yöneticinin tavrı	
Yönetici		Takim ruhu oluşturmak		Arkadaşlık	

Figure 0.4. Sample Revised Template

E. Quotes in the Original Language

CHAPTER 4

[9.4] Benim hayatta aldığım en büyük zevklerden biri bu firmada hiç üretilmemiş olan bir ürün, şu en baştan başlayıp en sona geldiğinizde, o makineyi kullandığımız andaki o haz, hiçbir şeyde yok, hiçbir şeyde yok. Benim hayatta hoşuma giden birçok şeyler vardır ama onun verdiği tadı hiçbir şey vermiyor. Yani bir arabaya binmek evet bana çok büyük bir zevk veriyor ama o makineyi kullanmak çok daha farklı bir şey. Yani böyle bir çocuğunuz gibi hissediyorsunuz onu.

[29.28] Benim ekibimdeki ilk söz şu: bileğiyle çalışacak adam istemiyorum ben açıkçası, ekibimde bileğiyle çalışan adam görmek de istemiyorum, size bunu samimi olarak söylüyorum. Bunu ustalarım da aynı şekilde söylüyorum. Ben yüreğiyle çalışan adamla ilgileniyorum. Yani insanlar yüreğini koydukları zaman bir şeye, üzerine bir şey koymaya başlıyorlar. (...) [29.61] Yani ben 3 tane koyun besleyeceğime 4 tane aslanım olsun benim burada proje için, böyle bakıyorum, her zaman da aynı şeyi söylüyorum. Yani o yüzden yüreği ile çalışan adam istiyorum.

[32.7] İşini severek yapmak kısmı var ya 'ruhunu satmadan' (güler) tasarımcı orada ya şu render'ı yapmadan çıkmayacağım da diyebiliyor; ürün yönetimi de diyebiliyor ki işte bir anda bir fiyat değişikliği kararı alınabiliyor ve bununla ilgili işte 3 gün orada kalabiliyor. bir gün sabahlayabiliyor. Hani bu tarz değişkenlikler, mesailer söz konusu olabiliyor. (...) mesela ben katalogların kontrollerini yapabiliyorum bir gece sabahlayarak. Yani o katalog ertesi gün baskıya girmesi gerekiyor fuara yetişmesi için.

[30.31] Keyif aldığım işler geldiği zaman bambaşka bir iş çıkıyor ortaya, bambaşka bir halimle çalışıyorum. Eşim bana şey diyebiliyor yani sen çocuğu görmeyeli çok fazla karakteri değişti diyebiliyor yani çünkü hani tamamen başka bir tarafa odaklanabiliyorsun hani aynen sokakta oyun oynayan çocuğun hissettiği şey gibi bir şeyden bahsediyorum, yani eve gitmek istemiyorum hani, vs.

[30.30] Eđer karřındaki kiřinin gerekten severek yapabileceęi bir iři verebiliyorsan, o iřle karřındakine para bile vermeden, oyun gibi dūřun bunu, hani insanlar sokaęa ıkıp oyun oynuyor. Oyun oynarken para kazanmıyorsun ama sabahlara kadar o iři yapabilirsin ünkü keyif alıyorsun bu iřten.

[30.39] Ben bir plan yaptım ancak bōyle olursa bu iř olur diye, sonra o planı yaptımında – mōmkōnati olmayan bir plandan bahsediyoruz yani her Őey aynı anda iřliyor, iřte hibir Őey sekmiyor, bōyle tam gōnōnde boyanıyor vesaire – kendim gōrdōm orada 43 gōn Őnce bitirebiliyorum bu modeli, eđer bōyle olursa - olmayacaęını biliyorum. O 43 gōnō Őey yaparak, her bir gōnōnō bōyle savař vererek, Őey yaparak, hani orada kaybettięim her gōnō silip onu kaybetmemek iin insanların canını sıkarak, bir buuk saat kala bitirdim! Yani son 14 gōn hi uyumadı ekip, ben dahil. (...) [30.42] Bayram dahil olmak ũzere bu ekibin hepsi her gōn sabah nerdeyse 5'te gitti 7'de tekrar geldi. alıřmaya bařladı. 5'te niye gitti diyeceksin? Bilmiyorum, evlerini bir gōrmek istiyorlardı arada sırada. Ekibin pijamaları vesaire her Őeyi buradaydı. [30.46] Her anı heyecan dolu diyeyim bir sōre yařandı. Őey gibi ya yani daędan kendini ařaęıya bırakanlar vardır ya hani, o eminim bařka bir yerde o adrenalini hissetmeyeceęi iin ok fazla mutlu olmayabilir, hani hayatının geri kalanında bir bardak bira imek ya da ok gōzel bir kızla tanışmak vesaire onu ok devamında mutlu etmeyebilir yani. Biz de ona benzer bir Őey yařadık iřte.

[24.46] Őu anda kariyerim yōneticilięe doęru evrildi otomotivde ama hani belki farklı bir sektōrde tekrar tasarımcı olarak iř yapabilirim. Onu gōrōřebilirim tekrardan. Tekrardan hani etkili bir ekibin ierisinde tasarımcıya gidebilirim yani. Benimki tamamen neyden ne kadar keyif aldıęımla alakalı. (...) Yani o iřten daha ok keyif alacaęımı dūřōndōęōm bir Őey olursa eđer, yōneticilięi bırakırım yani bōyle yōnetici olmak ya da tasarım mōdōrō olmak ya da bir tasarım ekibini tamamen yōnetmek gibi hedeflerim yok. Daha ok neyden keyif alıyorsam, ondan keyif alıyorsam ona doęru giderim bōyōk ihtimalle, Őbūrōnden keyif alıyorsam Őbūrōne doęru giderim. Hani benimki tamamen, tasarımlarda tamamen kendini tatmin etmekle alakalı. Eđer o iři sevmiyorsam, o iři bırakırım. Yani bunu da daha Őnce yaptım. (...) [24.49] mesela ok

duygusalsın falan gibi tepkiler alabiliyorum. Hani çok profesyonel bir tavır değil gibi geliyor insanlara ama bence profesyonel tavır bu olmalı bizim işimizde. Yani o işten zaten keyif alıyorsam yaratıcılığını zaten o zaman kullanabiliyorsun. O zaman seni aslında besliyor.

[9.4] Benim hayatta aldığım en büyük zevklerden biri bu firmada hiç üretilmemiş olan bir ürün, şu en baştan başlayıp en sona geldiğinizde, o makineyi kullandığınız andaki o haz, hiçbir şeyde yok, hiçbir şeyde yok. Benim hayatta hoşuma giden birçok şeyler vardır ama onun verdiği tadı hiçbir şey vermiyor. Yani bir arabaya binmek evet bana çok büyük bir zevk veriyor ama o makineyi kullanmak çok daha farklı bir şey. Yani böyle bir çocuğunuz gibi hissediyorsunuz onu.

[8.12] Sıfırdan bir makine tasarladık. Bu bize bir haz verdi tabi ki hani şu makinenin bir kısmını ben yaptım demek, o güzel bir şey, tasarımcı adına kendini gerçekleştirme adına güzel bir şey oluyor ve kendisine güven de veriyor. İşte ben farklı şeyler yapabilirim, ne bileyim dışarıda gördüğü bir başka bi' makine olsa, evet bunu da yapabilirim, bunun yapılmasında hiçbir sakınca yok gibi. Çünkü daha önce hiç bilmediği bir şeyi yapabilmesi adına o tasarımcıya bir güven verebiliyor. Ki başarılı da olunca insan mutlu oluyor.

[30.7] Yıllarca çalışıp tek bir ürün ortaya koyup pek çok insanı etkilemeye çalışmak önemli motivasyon kaynaklarından bir tanesi. Herkes kendi işinin kendi çiziminin kendi düşüncesinin o beşinci yılın sonunda piyasaya çıkmasını istiyor.

[30.52] Bence bir araç tasarımı yapan stüdyonun ödülü, gerçekten yapmış olduğu konseptin böyle (uluslararası) bir fuarda sergilenmesi.

[21.15] Sürecin sonunda da asıl güzel tarafı şu: başarıyla bir ürün çıktıysa, zamanında fotoğraf çekimleri yapılıp, fotoğraflar gelmeye başlıyor. Arkadaşlar bize işte Whatsapp gruplarından atmaya başlıyorlar, işte o zaman diyorsun ki ay ne güzel yaa, işte bitti, gerçekten oldu, orada işte birileri hikayeden de olsa o ürünleri kullanıyor. Fotoğraflanıyor, biliyorsun onlar bir yerlere ulaşacak, o an gerçekten güzel, keyifli bir an.

[21.9] Mesela benim üzerinde bir yıl boyunca çalıştığım bir ürünün televizyon reklamları çıktığında tabii ki çok mutlu hissettim yani. Motive edici bir şey bu.

[32.12] Ben bu işten keyif almasam, belki sonunda ürün görmesem, o ürünün doğduğunu görüyorum çünkü ben hani bütün o yaşam sürecini birlikte yaşadığımız için o duygusal tatmin noktası benim böyle bir iki noktada beni böyle tolere edebiliyor.

[29.7] 2003'te biz ilk aracı ürettiğimizde yurt dışında bir firmaya 150 tane araç sattık. (...) Ben ürettiğimiz aracı gördüğüm zaman – piyasada koşarken gördüğüm zaman – oturdum ağladım. Yani çünkü insan tek tek design ettiği, tasarımını yaptırdığı veya ürünü ürettirdiği zor güç bela – çünkü o güne kadar otobüsün tüm dış kaportası sacken komple kompozit hale geldi – kompozitin de tamamen çalıştığımız bölgede tedarikçi yok, soyunuyorsunuz, tulumu çekiyorsunuz, tedarikçinin mühendislik ekibini kuruyorsunuz, adamlarla birlikte üretim yaptırıyorsunuz adamlara, o ürünü alıyorsunuz otobüse takıyorsunuz. (...) [29.9] İşin hoşuma giden tarafı oradaki, benim baktığım başarı hikayesindeki ölçü belirli: yaptığımız ürün bir yerlere gidebiliyorsa, dünyanın herhangi bir yerinde ürününüzü görebiliyorsanız mutlu olursunuz. Bu vizyonu da seviyorum.

[29.11] 2015'te Avrupa'da bir fuara gittik. 2004 yılında ürettiğimiz bir otobüs gördük Hannover'de. Bizi alıp fuar alanından otelimize götürdü. Binerken ekibe dedim ki, beyler bakın size bir şey anlatacağım. Boş verin bir sonrakine binelim. Dedim bu aracı sene 2003-2004 yılında biz yaptık. Bu aracın bilmem neresinde bilmem ne var, şurasında bu hatalarımız vardı, tek tek anlatıyorum falan. Dedim ki, ne zaman biz kendi ürettiğimiz aracı Avrupa'da görürsek, o zaman biz bu işi başardık diyeceğiz. O zamana kadar devam. Çaremiz yok. Yani vermek istediğim vizyon da bu burada. Yapmak istediğim işler de bu. Yani biz ne yaptık? Nereye getirdik? Ne olduk? Ha adı benim olması önemli değil. Adı bir başkasının olması önemli değil. Bu milli bir şey.

[30.55] bu büyük bütçeler içerisinde benim burada ne biliyim model yapabilmem bana büyük bir haz veriyor şey hazzı veriyor yani yapmış olduğum modeli ben bir defa hiç kimse görmeden bir tane prototipini yapıp önüme koyuyorum üç kişiyle biniyorum

yani böyle hiç kalıbı yapılmadan dolayısıyla bence işin kendi içindeki büyüklüğü de şey sunuyor bir haz sağlıyor hani o yüzden başında dedim cam bardak yapandan daha fazla haz aldığımı düşünüyorum diye. Cam bardak yapan kişi de çok seviyordur onu belki vesaire vesaire ama bir şeye yaptığın yatırım ve gördüğün sonuçlar aldığın haz bende paralel ilerliyor, yani böyle yukarı doğru diyeyim.

[29.67] Hayat felsefesi basit yani basit yaşıyorum. Keyifli yaşıyorum. Keyif almaya çalış, yaptığım işi seviyorum. Yaptığım iş yurt dışına gittiği zaman daha keyif alıyorum. Hazırladığımız projeler bir arkadaşına bir şey öğrettiği zaman keyif alıyorum. Ekibim bir şeyler başardığı zaman keyif alıyorum. Yani size samimi olarak söylüyorum.

[29.23] 1'den büyükse benim için kabuldür. Bir şey yapmışınızdır. Bir yolda ilerliyoruzdur, düne göre biraz daha ilerdeyse sıkıntı yok. Ama diğer türlü sadece oturayım baykuş gibi kenarda izleyim, sadece eleştireyim, hayır!

31.8] Son aracı görmek değil de aradaki parça parça her şeyi görmek de bazen motivasyonunu sağlıyor insanın. (...) [31.7] Ben süreci bölüyorum bu sefer. Yani bütün bir süreci, aynı süreçmiş gibi değil de, süreç içerisindeki her bir fazı ayrı bölümlere ayırıyorum. Ve o bölümlere ayrı odaklanmaya çalışıyorum. ...öyle değerlendirirsem biraz daha kendimi o konuda motive ediyorum yani kendi motivasyonumu öyle sağlıyorum. Yani süreci kendi içerisinde bazı fazlara bölüyorum ve o anki parçaya konsantre olarak onu sağlamaya çalışıyorum.

[14.1] Arkadaşım bir tane braket yapıyor basit bir braket. Sana göre basit ama emek verdi o, bir gününü harcadı bazen beş gününü harcadı. Ya o braketini getirip ya işte x kardeşim arkadaşım bak ürün geldi yada takip ettinmi, geldimi, gördünmü? Gördü.Oldumu? Yetiyor onun için. Niye? Kısa zamanda sonuç gördü. İşte o yüzden biz mutlaka devreye giriyoruz ekip liderleri olarak.

[31.5] Bazen daha kısa süren lokal projelerde, daha kısa süren, bazen kendimi daha hevesli hissedebiliyorum ve daha etkili çalıştığıma inanıyorum öyle projelerde.

[29.68] İlk ay için rekor bir adet verdim ben yönetime elli iki adet araç vereceğim dedim bu ay size. Ve herkes şunu düşünüyor kesinlikle adım gibi eminim bu elli iki araç çıkmayacak diye hesap yapıyorlar. Bende dedim ki bunlara 49 kesin çıkacak üç tanesi koltukta çıkacak bunlar çünkü üç tanesi özel proje. Bu üç özel projenin bazı parçaları geç gelebilir. Geç gelirse de önümüzdeki ay teslim edilecek. Geç gelmezse bu ay teslim edilecek ama 49 tane net verilecek. 49 tane net verileceğini matematiğini yaparak çıkardım. Başka da bir şey yapmadım. Endüstri mühendisi arkadaşım da her gün programı takip ediyor sıkı bir şekilde. Başaracak mıyız? Evet başaracağız. Başardığımız zaman da son üç yılın ilk pik rakamını yapacağız.

[21.1] Bir kere ürün yönetiminin kontrolü hiç bırakmadığı - çok iyi hakim olduğu projeler çok iyi ilerliyor çünkü onların görevi biraz da insanları baskılamak, yani ittirmek yani dürtmek. Böyle bir gerçeklik var. ...[21.1] Ürün yönetiminin çok güzel, bütün gerekli kişilere gerekli zamanlarda görevlerini sürekli olarak hatırlatması, takip etmesi [21.2] İnsanların resmen birisinin böyle hatırlatmalarına işte nasıl diyeyim yani baskısına ihtiyacı var. Çünkü bir de herkesin günlük olarak yürüttüğü başka işleri – yani seri yeni ürün çıkartmanın dışında başka zorunlu görevleri var – yani performans sistemine girilmiş hedeflerimiz var. Yani birinin bunu bir şekilde hep hatırlatıyor ve yönetiyor, ittiriyor olması gerekiyor.

[30.41] son sanırım 30 gün bütün o planları vesaireyi boş verdim. Ve şöyle bir şey yapmaya başladım. Bugün bunu, bunu yaptık yarın bunu, bunu, bunu yapacağız. Yarın bunu, bunu yapacağız diye hep günlük planlarla ilerledim ve mümkün olan en çok şeyi yapmaya çalışarak devam ettim.

[23.25] Ortada bir problem var, işte atıyorum bir bilgi bekliyorum gelmiyor, ben onu oturup aylarca beklemiyorum. Gelmiyorsa, o bilgiye ulaşmanın yolunu arıyorum. Yani o sorduğum kişi vermiyorsa, müdürüne soruyorum. Müdürü bilmiyorsa işte başka birine soruyorum.

[23.26] Önceden daha şeydim mesela bir konu var ilerlemiyor, bekliyordum falan mesela, ilk yıllarımda diyeyim, böyle çok önceden – ya da bilmediğim bir konudan

daha çok korkuyordum, yani bilmediğim bir şeyden daha çok çekiniyordum, kendimi daha fazla strese sokuyordum hani nasıl yapacağım diye. Şimdi bunları kendimce aştığımı düşünüyorum. Bilmediğim bir konuysa, onu nasıl öğreneceğimi buluyorum, öğreneceğim departmana, kişiye, üreticiye, ürüne gidiyorum. Böyle olduğu zaman sonuçta en azından diyorum ki ben çabalıyorum bunu bulmak için, bir şeye varırım ya da varamam ama kafa olarak kendimi en azından iyi hissediyorum. Diğer türlü hem bilmiyorum, hem bir şey yapmıyorum, o yüzden onun sorumluluğu, yükü daha ağır oluyor.

[21.21] Hani ürün yönetimi ürünün sahibi demiştim ya, evet onlar sahibi ama mesela bize her zaman ürün departmanı müdürünün söylediği şöyle bir şey var: siz de onları taciz edebilirsiniz, yani siz de onları baskılayabilirsiniz. Diyelim ki işte şu tarihte gelmesi gerekiyordu proje, neden gelmedi, neden gelmedi, neden gelmedi? Çünkü hani evet sahip onlar ama sonuçta süre kısıtına maruz kalacak olan yine onlar ve biziz aslında. Dolayısıyla biz de tabi ki bir takım baskılarda bulunuyoruz.

[14.15] Şimdi bizim satın almada yapmamız gereken görev nedir? Bir, hangi ürünü satın alacağımızı bildirmek, onunla ilgili alt spec'leri vermek, mümkünse – ki genelde onu yapıyoruz – tedarikçiyi bildirmek. Şimdi, yaptım, bunun için benim görevim neydi? Bunu belirtmek, ve sistem üzerinden bu donelerle birlikte bir talep açmak. Bana sistem üzerinden bilgi düştü. O kişi işini yapması lazım. Evet, bitti mi işim bitmedi, ne yapıyorsunuz? Aldığınız o veriyi ona diyorsunuzki ben sistem üzerinden böyle bir satın alma yaptım. Şu şu konulara dikkat edersen bakın ayrı bir açıklama ve diyorsunki bu ürünü bilmem ne zamana kadar yetiştirmeli yadahiçbirşey demiyorsan bak bilgin olsun bu ürün sana geldi. Mail atıyorsunuz. Normalde yapmamamız gereken bir şey çünkü sistem çalışması lazım sistemden yaptınız ondan sonra kişiden mail beklediniz cevap gelmedi tamam demedi bir şey demedi açıyorsunuz telefonu X bey ben böyle böyle bir şey yaptım bilgin olsun ha tamam mı tamam. Üç gün geçiyor. X bey ne oldu bizim iş? Beş gün geçiyor ne oldu bizim iş? Altı gün geçiyor a ben onu unuttum. O zaman ne yap yap bana ulaştır. Biz devreye giriyoruz bazen. Oda oldu ürün gelmiş ama ben aramadığım için ambarda bekliyor. Misal işte bu sefer

başlıyorsunuz ürünü takip etmeye yani ürün buraya gelene kadar satın almanın sorumluluğu yok benim için. Sorumluluk bende bakıyorum. Dolayısı ile de yine buradaki o hızlı döngüyü çevirebiliyorsunuz. Yoksa ben bu işimi yaptım. Benden çıktı dersiniz ne ben o üründen zevk alıyorum ne de ilgili arkadaşım zevk alıyor. Niye? (...) Sizdeki enerji tükenmeden sonucu gördünüz. E yani bundan daha güzel bir şey olabilir mi?

[21.16] O anki ruh halin tabi ki of ya işte yüküm çok ağır, omuzlarımda yük var oluyor ama tabi ki onu yapıp bir adım koydukça, yapıp bir adım üstüne koydukça giderek tabi ki daha fazla artık mutluluk seviyen, haz seviyen artıyor.

[29.13] Aksi taktirde sabah ben işe gelmeyim. Canım istemiyor işe gelmek. Yani yeni bir şey yapmayacaksam, bir hedefimiz yoksa, farklı bir şey koymayacaksak zaten benim üretimde veya projede olmamın bir anlamı yok. Çünkü durduğunuz zaman biri sizi geçecek. Yani projenin de kuralı budur. Ben hep böyle öğrendim, hep böyle uyguladım. Eğer bu yaptığımız araç dünyadaki son araçtır, bundan daha ilerisini yapmayacağız dediysek, tamam abi bırakalım. Daha fazlasına gerek yok. İşte iPhone a gerek yok. iPhone 3 yetiyordu zaten, şu an iPhoneX'i konuşuyoruz, hiç gerek yoktu yani. Tamam on numara beş yıldız bir şeydi veya Graham telefonu icat ettiğinde bu işin bitmiş olması lazımdı. Yani eğer buysa. Hep bu tarafta da anlatmaya çalıştığım arkadaşlara bu. Eğer geçen yıldan farklı bir ürünümüz yoksa birisi bizi geçiyor demektir.

[32.13] Eğer bulunduğun yapının gücüne ve büyüklüğüne, o aradaki bütün steplerin sana kattığı noktalara gerçekten böyle nasıl diyeyim alıyorsan hissediyorsan, bu seni orada bir şekilde tutuyor.

[30.8] Üst üste 3 kez mesela bir kişinin tasarımının beğenildiğini varsay ya da onun diğerlerine fark yarattığını varsay, diğerlerinin daha önünde olduğunu varsay. Bu 2. defa 3. defa bazen 10. defadan sonra - karşı tarafın umursama durumuna biraz bağlı - kaybeden tarafın kendine başka bir yol araması bu işte çok muhtemel oluyor. Dolayısıyla orda bir sirkülasyon var o sirkülasyon da dizayn yöneticilerinin başa

çıkarmaya çalıştığı şeylerden bir tanesi.

[31.26] Yedek kulübesinde çok fazla oturan bir futbolcu gibi düşünürsek bunu, bundan memnun olup orada oturan futbolcu da olabilir, orada oturup para kazanan bir insan da olabilir ama devamlı aktif olarak çalışmak isteyen bir tasarımcıysa genelde iş değişikliğine gidiyor. Yani böyle kararlar alanlar oldu gerçekten seçilmiyorsa eğer, bu konuda da kendini yetkin hissetmiyorsa başka sektöre ya da başka şirkete geçmeler olabiliyor.

[34.5] Şu çok büyük bir etkendi benim özelimde: projenin hayata geçeceğine inanmak. Ya inanmıyorsam benim için o proje azaba dönüşüyordu çünkü projeyi yapıyorsunuz rafa kalkıyor, yapıyorsunuz rafa kalkıyor, yapıyorsunuz rafa kalkıyor. Bazen çok basit projelerde bile oluyor. e bu ciddi motivasyonsuzluğuma sebep oluyor.

[23.21] Mesela bazen kendinle ilgili, yani o bir şey çıkaramamanın verdiği bir zevksizlik oluyor yani. Motivasyon düşüklüğü oluyor. Yani gerçekten sen inanmadığın bir şeyle devam ettiğin zaman ya da ortaya tam çıkaramadığında mutsuz oluyorsun. Çünkü gelen süreci deneyimlerinden biliyorsun artık, çok da iyi gitmeyeceğini. Tabi bir başarısızlık yolu olmuş oluyor yani.

[24.7] Eğer o projeyi benimsediyse kişi, o zaman da ekipler daha motive çalışabiliyorlar.

[23.22] Olmayan bir şey varsa şey yapıyorum, orada bir bırakıyorum. Tamam yani evet, şu noktada ilerleyemiyorum, yardım alıyorum, şeye inanıyorum yani hani bir şekilde o olacak. Yani olacak yani. Ama onun yolunu bulmaya çalışıyorum, birinden bilgi almak mı, bir yere gitmek mi, bir şeyi görmek mi, araştırmak mı neyse. Şu an onları yapıyorum, yani stresimi, o kendi üzerime kurduğum baskıyı azaltıyorum açıkçası. Ve aslında her şeyin bir noktaya varacağını biliyorum. Yani diyorum ki bundan önce de birçok şey olumsuz gitti ama sonuçta ben onu yaptım bir şekilde, bunu da yapacağım. Yapmanın bir yolu mutlaka var. Yapmanın yolu olmayan bir şeyde de yapmıyorum, onu yapmıyorum artık başka bir şey yapmam gerekiyor diyorum kendime, demek ki bu değil bunun çözümü. Başka bir yola giriyorum. Belki de

dediğim gibi birazcık artık iş tecrübesiyle, yaşam tecrübesiyle ilgili bir şey olabilir.

[29.87] Çözmek zorundayım çünkü çarem yok. Bir şeye ulaşmak istiyorsam ve inanıyorsam eğer. Ha inancımı üst yönetimin paylaşmadığı dönemlerde olmuştur. Ben onu kenara alırım. Tekrar zamanı gelince çıkmak üzere. (...) [29.89] Daha önce çalıştığım bir firmada ben çalışırken satın alma direktörünün hayır dediği bir projeyi CEO ile çözdüm. Niye CEO ile çözdüm? Bana hayır dedi çünkü ve ben buna inanıyordum. İnanmışım bir şeyde de inandığım bir şeyi genel müdürüme anlattım genel müdürüm dedi ki CEO falan gün gelecek bunu bir sunum olarak hazırla getir bana teslim et. Dedim direktörün haberi yok, ağzıma sığar açık ve net söyledim. Onu dert etme dedi hiç bir şey diyemez. Ve beni bir fabrika operasyon toplantısına çağırdı. Çağatay Bey'in bir sunumu vardı çık Çağatay. Ben sunumu yaptım geldim.

[7.6] Bakın bu işin sahibi biziz. Başta SerhatBey proje sahibi, sonra ben, bu işin derdiyle dertlenen biziz. Biz her bölüme gidip kapı çalıp, ya bi' bakalım ya şu anda müsait değiliz bi' bakalım bugün müsait misin? Yarın yapsak, ya akşama dur bakalım, tamam peki, onlarda yoğunlar çünkü onların üretimin telaşı ürün yapmak seri halde üretim veriyor. Satın alma zaten günlük bir sürü işi var ya bu işleride biz bize destek oluyorlar öyle söyleyeyim.

[34.15] Projeyi sevdiğimde daha disiplinli yaklaşıyorum işe karşı. Çalışmayı kabullendiğim için süreçleri daha çok yaşayarak çalışıyorum diyebilirim. Öteki türlü bir geçiştirme oluyor hatta bazen yani şöyle söyleyeyim bazı projelerimde şey yapmışımdır yani o kadar ezbere yapıyorum ki onu yapmaya çalıştım ki proje süresinin dörtte birlik bir kısmını sadece ona ayırarak yaptığım projelerim bile olmuştur yani.

[7.12] Burada ekip işi, inanmışlık işi, oda önemli yani salt süreç değil, süreç bunu disipline ediyor. Ama süreç dışında oradaki insanların yetkinliği, bu işe inanmışlığı, bu işe kafa yorması, yani o formula oynuyorsun ama neye göre oynuyorsun, adam beğenmiyor,bassa geçse geçebilir geçmiyor, takıyor kafaya. (...) Süreç burada disipline ediyor, süreç bazen bunaltıyor da hatta.

[29.91] X aracında dört tane beş tane keskin çizgi vardır. Fiberglass ile verilemeyecek çizgilerdir. Ben bunun için dört gün kalıpcıda çalıştım. Kendim çalıştım. Kendim yaptım bunun kalıbını.

[30.45] Gece geldi kamyon şoförü, ertesi gün kutuları bir açtık hiçbir far aydınlatma elemanı çalışmıyor. Hepsi bir şekilde bozulmuş ben hayatımda lehim yapmadım ama bütün farları orda söktük açtık, lehim yapıp fire yapmayı gece öğrendik orda bir tane elektronikçi arkadaştan herkes, herkes dediğim bir kişi geldi benle beraber iki kişi lehim yapıp sabaha kadar farı çalıştırabilir, çalışır hale getirdik.

[32.4] O projeye ürün yöneticisi çok inandıysa bunu savunmaya geçiyor. Aslında bunu kanıtlama ihtiyacı duyuyor ve bunu hayata geçirmek için de mücadelesini veriyor. Belki hani o kendisinin de inanmadığı ya da sindirmediği, içselleştirmedeği bir şey olsa, bunda bu kadar ısrarcı olmaz. Bu senin hani ürüne hakimiyetin, yaptığın işe hakimiyetin, ürün gamına hakimiyetin. Aslında bütün yaptığın, orada bulunduğun süre içinde yönettiğin sürecin hakimiyetinin bir sonucu.

[24.27] Eğer ürüne güvenmiyorsa zaten, a öyle mi, senin istediğin ne o zaman, ben ona göre yöneleyim diyebiliyor mesela. Hani yaptığı ürüne, tasarladığı ürüne güvenen tasarımcıyla güvenmeyen tasarımcı arasında hani şey olabiliyor, böyle bir anda eleştirmeye başladığında 180 derece dönebiliyor mesela. Öyle tasarımcılar da olabiliyor mesela, onlarla çalışmak, yani (hoşnutsuz bir ses tonu) Yani sonrasında arkasında duramayacağı ürünü tasarlıyorsa tasarımcı, yani bence doğru ürün tasarlamıyor demektir.

[34.13] İnovatif bir yaklaşım sergileme ihtimali arttıkça projeyi kabullenmem artıyor diyebilirim. [34.14] Yaparken eğlenebilmem önemli bu konuda.

[24.48] Sen bir işten ne kadar keyif alıyorsan aslında o işte o kadar başarılı oluyorsun. Yani keyif almadığın bir işe gittiğinde ya da onu yaptığında zaten o iş başarısızlıkla sonuçlanıyor.

[24.29] Ne kadar yaratıcılığını serbest bırakıyorsa projenin kendisi, o kadar senin daha çok keyif almana yönelik oluyor proje, öyle diyeyim. Mesela hani eğer şey tasarlıyorsak, gelecek 5 sene sonrasının, 10 sene sonrasının aracını tasarladığımız bir platformda konuşuyorsak, o zaman her şey daha keyifli oluyor. Çünkü ne oluyor, daha ileriye dönük teknolojiler kullanabiliyorsun, araç kullanımları öngörebiliyorsun. Onlar aslında tasarımı etkileyen şeyler, tasarımı belirli noktalarını oluşturan değerler olabiliyor. Onlar daha keyiflendiriyor işi de daha keyifli hale getiriyor. [24.30] Daha fütüristikte daha çok keyif alıyorsun gerçekten çünkü orada daha aktif bir yaratıcılık kullanıyorsun, ötekinde seni belirleyen üretim yöntemleri, malzemenin kullanımı, hani seni kısıtlayan kıstaslar ne kadar fazlaşıyorsa, o kadar işten ya da projeden keyif alma durumun da değişkenlik gösteriyor diyebilirim.

[30.54] Tasarımcıyı daha çok mutlu eden, motive eden, etrafını da mutlu eden şey, yeni proje, yeni bir heyecan, işte zor bir proje, daha fazla imkan ayrılıp daha fazla para ayrılıp, benim bunu yaparken daha fazla bütçe kullanmam.

[14.17] Üründe diyorsunuz ki ben firma dilini konuşturacağım. Ben, tasarım stüdyo özellikle endüstriyel tasarımı yani firmadaki tasarım stüdyonun varlığını hissettireceğim. Dünyaya bakışını, firmaya bakışını, tasarımcının bakışını, bu üründe yansıtacağım diyorsunuz. Yani bu çok güzel bir fırsattır. İlk defa elinize aracın kompleksinde yani lokal olarak spesifik şeyler değil ürünün genelinde söz sahibisiniz. Müthiş bir şey. Bizim için bu yetiyor zaten. İşte burada diyorsunuzki şunu karar veriyorsunuz o çalışmaların hepsinde benim burada atmış olduğum adım, bundan sonra atacağım adımların birinci basamağıdır.

[3.17] Burada bir kere bizde olmayan bir şeyi yapmaya çalıştığımızdan dolayı bir kere ilişkide olduğumuz bütün departmanlarda o departmanın en başındaki kimse, o dahil bütün bu toplantılara katıldı herkes. Yani mesela standart bir ürün olsa, standart bir ebat olsa, çünkü sonuçta bu işlerin – her bölüm için öyle de – bu işlerin her bölümün de başındaki insanın zamanını da iyi yönetmek zorundayız, yani sonuçta zaman da bir kaynak onu da iyi yönetmek zorundayız, en başındaki insanın standart bir ürünün

değerlendirmesini yaparken bu toplantılara girmesine gerek yok, ama [3. 16] mesela biz bu süreçte en başındaki insan dahil herkes süreçte bu işe inanarak geldi, bu toplantılara katıldı, kavga ettiğimiz zamanlar da oldu, güldüğümüz zamanlar da oldu, öyle yani...

[30.32] İçerisinde işte inovasyon barındıran, çok az kişinin yaptığı belli olan dolayısıyla birim başına düşen sorumluluğun çok yüksek olduğu, biz bu işi yaparken 3 tane çok profesyonel firmadan teklif alarak ve bu zaman diliminde teklif veremeyeceğini söylediler yani bu kadar zamanda bu işin yapılamayacağını söylediler, içerisinde böyle bir zorluk barındıran, olmazı oldurtmak gibi bir şeyden bahsediyorum. Mümkünse gün içerisinde en az 5-8 tane dizayn kararı alıp milyonlarca şey harcayabileceğin prototip bedeli harcayabileceğin, kimsenin bana dur demediği böyle çok hızlı çok sık gelmeyecek karşına ama bittiğinde de böyle şeyler barındırabilen... (...) [30.38] bu işi sunduğumuz genel müdür yardımcısı bana şey dedi parayı verecek olan adamdan bahsediyorum. Olcay dedi biz 100-200 daha fazla verelim yani bir firmaya da yaptırabiliriz dedi. Ondan sonra ben yok yaparız dedim. Sonra çıktık, geldim aşağı, ekip benim işte bu işi yapacağım ekip – mavi yakalı, beyaz yakalı arkadaşlar - dediler ki ne oldu? Dedim dediler ki bir 100-200 daha fazla verelim dışarıda bir yere yaptır dediler dedim. Ondan sonra ee sen ne dedin dediler. Biz yaparız dedim, dedim. Ondan sonra Allah kahretmesin seni falan diye yani bir kalkıp gittiler dağıldılar sonra. Yani şöyle bir durum var. Bu çocukları görse hepsi de aynı cevabı verecek adamlar. Yani çünkü [30.38] it gibi istiyorlar bu işi yapmayı öyle bir ekipten bahsediyorum. [30.43] Aslında o Allah kahretmesin diyen adamlar bunu gülümseyerek söylüyorlardı. Çünkü zaten onlar benim bu cevabı vereceğimi biliyorlardı. Ve dediğim gibi onlara da sorsaydı bu kişi, yine onlarda o kararı verirlerdi. Yani [30.43] bu işin gerçekten sahibi olarak hissediyorlardı kendilerini. Sebep o yani.

[31.22] Ben mesela 3 boyutlu modelleme ile ilgili bir iş yapıyorsam, 3 boyutlu modellemeyi yapayım da bitireyim. Ondan sonrası beni ilgilendirmez şeklinde olabiliyor iş yani ben bitireyim o işi tamamlayım, vereyim, hani inanmıyorsanız

yaptığı işe, ben o çizili sınırlar içerisinde, kendi sınırlarım içerisinde işim neyse onu yapayım, vereyim ve o süreçten sonraki arkadaşlar bunu düşünsün şeklinde iş ilerleyebiliyor bazen. Yaptığınız işe inanmıyorsanız ve mecbursanız da onu yapmaya öyle bir çıktı olabiliyor.

[35.2] Estetik projeleri inanın motivasyon düşüklüğünden bilmiyorum 2-3 saatte çıkaracağınız bir şeyi 1 haftada üfleye püfleye çıkartıyorsunuz ama yenilikçi projelerde değişik düşünceleri adapte etmede günde 10 tane çıkartabilirsiniz yani ben öyle düşünüyorum.

[30.29] son çıkan kamyonda bu ekip 1500 kişiyle ve kimse bu kadar bağlılık hissetmiyor bu çıkan ürüne, bunu ben tasarladım benim ekibim tasarladı ama yine de buna çok fazla el değdiği için başka yerlerden, başka departmanlardan, kimse hani başta dedim ya benim istediğim gibi olmayacak ama kimsenin istediği gibi de olmayacak. Herkesin dediğinden biraz olacak, bu iş biraz herkesin dediğinden biraz olduğunda, şeyin zorlaştığını düşünüyorum: bu işin şeyinin zorlaştığını düşünüyorum yani bağlılık, işle bağlılık kurmanın.

[23.11] Bir proje vardı: ya o arkadaşta o proje mesela sonradan yüklendi. Başını bilmiyor. İşte sonradan almış oldu. Aslında o projenin iyi olacağına da inanmıyor yani bir ürün yöneticisi olarak. Ama işte bir brief verilmiş ve yapılması gerekiyor. İşte devam etmesi gerekiyor. Mesela süreç içerisinde proje ile gerçekten ilgilenmiyor çok fazla. Yani böyle şey, mesela normalde notlarını tutup atması gerekir, pek atmıyor. Soruyorum neden atmadın falan. Ya işte sevmiyorum ben bu projeyi falan bile diyor yani anladın mı?

[34.3] Bazı durumlarda Ar-Ge'lerin risk almamak istemeleri, projeyi yokuşa sürüklüyorlar, çünkü yeni bir şey deneyecekler, maliyetli, zaman alan bir süreç olacak, deneyecek olmayacak, tekrara deneyecek olmayacak. Böyle bir sürece girmek istemiyorlar kolay kolay.

[29.30] tekrar eden şeylerde hata yapma olasılığı çok daha yüksek oluyor. Aynı şeyi, aynı projeyi defalarca oluşturunca bu sefer kör çalışmaya başlıyor. Dikkatini vermiyor, şartnameyi okumuyor, değişkenliklere bakmıyor yani bunlar çok yaşadığımız şeyler. O yüzden mutlaka her seferinde şey derler, Çağatay abi çok iyidir, hoştur ama azıcık da rahatsızdır derler (güler). Her seferinde bir şeyleriyle uğraşmasa olmaz yani falan filan diye homurdandıkları geliyor zaten.

[30.47] Yapmış olduğun çok büyük işler ekip için bir demotivasyon kaynağı olabiliyor. Çünkü şimdi çok küçük bir iş, sıradan bir iş yapma zamanı geldi. Yani burası çünkü kamyonun bir şeyinin bir köşesindeki bir yeri de yapmak durumunda kalıyor ve sıklıkla bunu yapmak durumunda kalıyor. Şimdi geldik onun motivasyonunu bulmakta, yani o, işte 2 gün önce fuarın yıldızı olan adam, bugün başka bir şey yapmak zorunda ve hani bunu yaparken aynı hissiyatı hissetmesini istiyor olacağız. Ama bunun için herhangi bir planım yok şu anda bilmiyorum şu anda ne yapacağım

[32.14] Bir insana acaba işi nasıl sahiplendirirsin? - Orada şu var, kilit nokta şu: yaptıkları işin neye hizmet ettiğini gösterdiğin kanalları açıyorsun. Yani sen ona bir iş veriyorsun, o 3 gün sabahlıyor belki, 3 gün ona kafa yoruyor. Sonra o 3 günün sonunda çıkardığı sonuç hangi noktalara ne aşamalarda değişiyor? Yani o karınca olarak hangi büyük dağın bir parçasını yarattı?

[24.32] Hani ben şeye dikkat ediyorum, takımım ile ilgili konuşacaksam eğer, insanların en fazla keyif aldığı işleri onlara yönlendirmeye çalışıyorum. Hani mesela bazı arkadaşlar modellemeden çok keyif alıyor, onlara işin modelleme kısmını yönlendirip onların programlamalarını modelleme üzerinden yapıyorum işte o planlarını. Bazıları işin sketch aşamasında çok eğleniyor, hani ona sketch'i vermeye çalışıyorum. Diğerleri mesela creative idea belirlerken çok eğleniyor, daha yaratıcı ve sürece mesela daha olumlu katkısı oluyor, onu da creative idea ya da hani ne denir, sonrasındaki görsel – projenin sonuçta bir de sunum görselleştirmeleri var – mesela onlarda değerlendiriyoruz ekibi. O şekilde işleri dağıtmaya çalışarak hani en

motivasyonu..aslinda şunu ayarlamaya çalışıyorum, kişinin motivasyonu ve yapma isteği hangi işteyse, ona yönlendirip o şekilde ekibi yönetmeye çalışıyorum.

[31.9] Motivasyon düşük olunca genellikle bazı şeyleri değiştirmeyi öngörüyorum ben yani mesela kamyon projesi üzerinde çalışıyorsak başka bir işle ilgili bir şey vermeye çalışıyorum ki değişiklik olsun hani onun motivasyonu artsın. ...eldeki şeyi biraz çaprazlamak yani

[29.29] standart paket beni her zaman sıkıyor, her seferinde de ya hiçbir şeyini değiştirmesem kamyonunda genellikle en çok oynadığım şey çamurluktur. Ya şuna şöyle bir çamurluk yapalım ne diyorsunuz ve onu da şu su tankerinde uygulayalım. Yani su tankeri bizde en basit ve kambur görünen projedir. Bunu attığımız zaman o beğenmediğiniz kıyırık su tankeri biraz daha heyecanlı bir su tankerine dönüşüyor. Bunu sağlamaya çalışıyorum mümkün olduğu kadar, değilse standart paketten hızlı çevirim alıyoruz, vakit kaybetmeden devam edin diyorum. Çünkü takıldığı zaman çocuğu orada tutmak yanlış oluyor, bu sefer [30] tekrar eden şeylerde hata yapma olasılığı çok daha yüksek oluyor. Aynı şeyi, aynı projeyi defalarca oluşturunca bu sefer kör çalışmaya başlıyor. Dikkatini vermiyor, şartnameyi okumuyor, değişkenliklere bakmıyor yani bunlar çok yaşadığımız şeyler.

[22.28] Mesela bazen ürün geliştirmede oluyor, çok tarifli de geliyor ürünler, işte burasını kısalt, buraya şey ekle, buraya dolap ekle bilmemne. Şimdi tasarımcı bunu yapmak istemiyor. Operatör gibi bir şey. Tamam diyorum sen onu çiz, zaten hiçbir şey yok, bir tane de sen öner diyorum. Hem buranın vizyonu için önemli, çünkü tarif edilen kolay, hem de onları da daha tasarım yapıyor şeyini kazandırmak için önemli.

[24.35] mesela hep araç tasarlıyoruz ya, hep araç tasarlamayalım haftada bir gün, yarım gün farklı bir şey tasarlayalım ama ne olsun üzerinden gidiyoruz. Hani bundan iş olmuyor bize ama bunlar creativeidea'yı güçlendiren şeyler olmuş oluyor. O da tamamen benim bölüm içinde yaptığım bir şey. Yoksa bütün şirket böyle çalışıyor değil. Çünkü ben de sıkılıyorum. Hani ne yapıyoruz mesela, son iki saat, hadi şöyle bir konteynırı olan bir şey tasarlayalım'a dönüşüyor. Ya da firmanın çizgilerini

kullandığım bir web cam olsa nasıl bir şey olurdu? Falan gibi böyle küçük şeylerle eğleniyoruz diyeyim. O şekilde gitmezsek çünkü hep araç hep araç hep araç gerçekten sıkılıyor herkes yani, ben de sıkılıyorum. Ben de farklı şeyler yapmak istiyorum, o şekilde götürüyoruz.

[11.2] Yeni proje her zaman ayrı, farklı bilgi katıyor. Mesela her makinemizin birbirinden farklı işlevleri var. Mesela sistemsel olarak farklılıkları var. Ondan sonra özellik olarak farklılıkları olduğu için yani bu her zaman artı bir şey olarak geliyor bize. Bilgi olarak geliyor bize yani, o şekilde yeni projenin daima bilgi kattığına ben inanıyorum.

[24.25] Sıfırdan yaptığımız araçta gerçekten çok keyifle çalışıyordum. Çünkü her seferinde yeni bir şey öğreniyordum. Yani beni tetikleyen şeylerden biri aslında hani – tasarımcı olarak tetikleyen şeylerden bir tanesi, tamamen kişisel bir yön bu belki de – yeni bir şey öğreniyor olmak beni çok tetikliyor. Hani eğer o parçayı ilk defa tasarlıyorsam, o zaman çok daha ayrı bir şeyle çalışıyorum, hani ne denir, şevkle çalışıyorum. Daha fazla araştırma yapıp, daha çok üstünde yoğunlaşıp, daha çok sketch yapıp, daha çok analiz yapıp hani daha fazla kişisel zamanımdan verip o şekilde çalışıyorum. Çünkü hani hep bi’ daha iyiyi bulma isteğiyle çalıştığım için, orada sürecim daha şevkle oluyor. Ama hani daha önce tasarladıysam o parçayı, o zaman hani biraz daha soğuk davranabiliyorum o parçaya karşı (gülür).

[21.13] Yeni bir malzeme bulmuş olmak, denemiş olmak, bu benim için çok heyecan verici bir şey. Mesela performans hedefleri konurken ben özellikle talep ediyorum yani bunların olması ve bunlar için bize zaman tanınması konusunda. Bu çok haz verici bir şey benim için. (...)[21.14] Yurt dışında bir şey görüyoruz mesela, onun ne olduğunu arıyoruz, arıyoruz, arıyoruz, adını bilmiyoruz, bir şey bilmiyoruz ama onu bir şekilde buluyoruz, o geliyor. O paketi bile açarken içinden çıkacak şeyi ilk elimize alıp aa bak geldi falan işte şöyleymiş, böyleymiş diye baktığımız an bile çok keyif verici.

[21.5] Ben şey dedim, önümüzdeki yıl ben kendime de yeni bir şey katacağım bir proje istiyorum. Daha zor bir proje olsun – upsegment projeler genelde daha zor olur – öyle bir proje istiyorum dedim. Bu dikkate alındı mesela şimdi bana upsegment bir proje verildi. (...) [21.6] ben muhtemelen seneye şunu diyor olurum ‘ben biraz da ecosegmentteki ürünlere gireyim’ diyor olurum yani. Herkesin böyle bir beklentisi oluyor, değiştirmek istiyor herkes.

[23.24] Genel olarak şey yapıyoruz, projeler bizde segmentler var demiştim başta, yani bunu şey gibi de düşünebilirsin; segment ne kadar yukarıya çıktıkça, malzeme ve bilgi detayının o kadar artması gerekiyor. Bunu değişimli olarak veriyorlar yani her yıl bana en alt seviyedeki segmenti verirse, ben yeni malzemeleri tanıyamıyorum olurum, çünkü hep mevcutlarda bir şey yapıyor olurum. O yüzden onu mesela biz de talep ediyoruz bu arada yöneticimizden. Ben diyorum ki bu yıl bana lütfen hani üst segment bir şey verin, ben de kendimi geliştireyim yeni malzeme konusunda, yeni ürün konusunda. Hani o anlamda ama bir şeyimiz yok hani öyle bir değişiyor yani, herkesin kendi, zaten ana beklentileri herkesin kendini geliştirmesi.

[34.6] Şu da bir motivasyon: mesela farklı bir ürün geliyor, oradan birşeyler öğrenmeye başlıyorsun. Bu da bir etken. Birşeyler öğreniyor olmak, farklı bir şey deneyimledim, proje yönetimi yaptım, farklı kişileri bir arada buluşturdum, çoğu zaman yapılış kısmında da bizzat ben rol oynadım, işte elektronik kartların bağlanması, işte parçaların demontajı, montajı. bu benim için bulunmak istediğim keyifli bir süreçti, çok şey öğrendim. (...) [34.11] Sürekli ilgilendiğim projenin dışında, farklı bir şey olması, ki o da öğrenmeyle doğrudan ilişkili bir şey, orada farklı bir deneyime açık oluyorsunuz, o zaman projeyi daha çok sahipleniyorum.

[35.7] Baya keyifliydi çünkü yapmadığım bir şeydi daha önce ve araştırma - ben genelde araştırmayı seviyorum - yaptığım projelerde bilimsel bir dayanağı olsun isterim, sadece öngörü ya da bilinçaltından değil de işte araştırma sonuçlarını gösterip nereden geldiğini bir şekilde göstermeye çalışırım. Daha kabul edilebilir oluyor. Bu beni motive ediyor mesela, birşeyler öğrenmem.

[30.34] Ben şöyle düşünüyorum - ben kendişlerimde de böyle düşünüyorum - herhangi bir iş geldiğinde bu ne kadar zor olursa olsun ben bunu nasıl yaparım diye düşünüyorsam o zaman daha doğrusu onu artık yapmış oluyorsun. Ben bunu nasıl yapamam diye düşündüğün anda zaten pek çok sebep bulabiliriz. O kadar çok sebep geliyor ki önüne zaten yapamayacağına kendini ikna etmiş oluyorsun.

[29.84] Yaptığım işte de koyduğum kurallarda yüreğinle çalış, kimin neyi anlattığını umursamayın. Nasıl yapılacağını düşünün. Nasıl olmayacağını çünkü herkes anlatır size sıkıntı yok. Nasıl olacağını sizin bulmanız lazım. Bunu bulduğunuz zaman zaten çözüm üretiliyor. Hep de bu yönde çalıştım şu ana kadar.

[29.69] Ben 'çıkamaz'ı biliyorum da benim derdim 'nasıl çıkar'! ...[29.69] Yani bana 'nasıl çıkamaz'ı anlatmayın, bunu herkes anlatıyor bana zaten aşağıda, yetmiş tane adamım var yetmiş de bana bu elli iki aracın nasıl çıkmayacağını anlatıyor. [29.72] Ben dedim ki arkadaşlar bakın nasıl çıkmayacağını nasıl olmayacağını bana anlatmayın, bunları zaten yıllarca herkese anlattınız. Soracağımız soruları değiştiriyoruz! Çünkü nasıl çıkarı anlatın! Bir adam mı lazım, makine mi lazım? Malzeme mi lazım? Ordumu lazım? (...) [29.77] olmayacağını ben zaten herkesten duyuyorum. Yani bana genel müdürüm de aynı şeyi söylüyor, olmaz diyor. Niye? Para kaybederiz. Ben bunların hepsini zaten biliyorum. Mesele nasıl olur?

[29.15] Her Cumartesi proje ekibinin saat 10'la 1 arası toplantısı var. Bunun 1 saati yemek zaten, dışarı çıkıyoruz. 2 saati de tamamen trende yönelik toplantı. Şimdi ekip çok genç olunca, o gün, atıyorum, örnek veriyorum standartta basamak genişliği niye basamak genişliği ve yüksekliği 400mm, bir sonraki basamak 300, sonraki bilmem 200? Soru bu. Arkadaşları topluyorum, diyorum ki arkadaşlar regülasyonda böyle bir soru var. Neden böyledir? (güler) Hadi bakalım. Bu soruları arkadaşlara siz sorduğunuz zaman, kendilerine soru sormaya başlıyorlar. Kendine soru soran mühendisten tasarımcı çıkar (tasarım mühendisi). Kendisine soru sormayan mühendisten tasarımcı çıkmaz. Zaten bu soruları kendilerine sordukları zaman küçük bir arama konferansı yapıyoruz aslında, her hafta, rutin. Rutinde bu arama

konferansını yaptığımız zaman, ekip biraz şakayla, biraz gırgırla, biraz espriyle bir şeyler öğreniyor, bir şeyler düşünmeye başlıyor. Sonrasında diyor ki ya işte biz basamak genişliğini şunu yapmıştık, demek ki hata etmişiz, bundan sonra böyle yapalım. (...) [29.16] Soruyu en güzel insan kendine sorar. Çünkü orada perde yok. Yani size sorarken azıcık çekinir, kızar mı, ayıplar mı, horlar mı diye düşünür ya insan, kendine sorarken sorun yok. Benim bütün derdim, arkadaşlarıma bu tarz ufak toplantılarda yapmaya çalıştığım şey, kendilerine soru sordurmak. Bu zaten yeni ekibe katılan bir arkadaşımda 3-4 ayda oturuyor. Sonrasında, hakim olduğu üretim prosesi alanına girdiği anda, soruları daha çeşitleniyor.

[22.19] Herkes birbirine bu konuda destek. Sorabiliyorlar. Yöneticileri var. Yöneticilerine sorabiliyorlar. Özellikle bir şey yapmıyoruz ama kendi çalışma yöntemimizden kaynaklı birbirimize devamlı soruyoruz. Ben bile devamlı – hani kaç yıllık deneyimim var – arkadaşlar sizce böyle mi, şöyle mi yapalım? Hani o iletişimimizi hep bir arada konuşarak sağlıyoruz diyebilirim yani.

[29.20] Ekiple teke tek yaptığımız toplantılarda her soru ve kavga serbest, tartışabilirler benle hiçbir sıkıntı yok – saygı çerçevesini aşmadığı sürece hiçbir sıkıntı yok – ne kadar aptalca olursa olsun kimse kimseyi yargılamamaya çalışıyor. Yani onu oluşturmaya çalışıyorum zaten bütün derdim o. Onu oluşturduktan sonra serbest konuşmaya başlayınca bir şeyler çıkıyor ortaya.

[22.15] Şöyle bir çalışma yapmıştım, bir arkadaşımızla: şimdi şöyle süreçleri tutturamıyor, onları çağırıyorum. Diyorum ki şimdi dinleyim ben, neden sence? Ben çok fazla konuşmuyorum, onların anlatmasını istiyorum. Yani bizim de göremediğimiz bir şeyler olabilir. İş mi bölünüyor, bir şey mi oluyor, yani süreçlerin neden geç kalıyor? Sen düşün. ...verdik kağıdı eline, gün içerisinde neler yapıyorsun yaz dedik. Kendin yaz, not al, sonra bakalım. Kendileri yazdıkları için nerede kayıp yaptıklarını görüyorlar. İşte ben diyor aa burada ne kadar oyalanmışım. Aslında ona göre verimli yaptım gibi görünüyor, ama şeyine kadar, tuvaletine çayına kadar yazdı o arkadaşlar. Sonra kendileri dedi ki tamam, böyle bir sıkıntı var. (...) [22.18] Mesela

geçen toplantı yaptık, tasarım süreçlerimizde neleri iyileştirebiliriz? Biz bunu yaptık, anlattım ya ben size az önce, doğru mu yapıyoruz dedim. Şimdi bazı projelerde sarkmalar var, doğru mu yapıyoruz, belki de yanlış yapıyoruz. İşte moodboard en başta, en sonda mı sunacağız moodboard’u dedim? Hemen onlar önerilerle geldiler, işte şurada şunu yapabiliriz, burada bunu yapabiliriz, yani onların önerilerini toplamak da süreci iyileştiriyor.

[29.52] Beğenmediğim yeni çalışmalar oldu. Bunun olmayacağını o genç adamın yaşaması daha doğrudur. Ben ona açık açık söylüyorum diyorum ki bu çalışma olmayacak sıkıntıları var bunların şu mühendislik problemlerini çözmeye çalış tereddüdün var, prototipte çözmek istiyorsan da maliyetine bakıyorum çok yüksek değilse prototipini yap sahada çözelim beraber, Çözeriz. Çözemiyorsak da tamam kaldırıp atalım ne öğrenmiş olduk bunun olmayacağını öğrenmiş olduk. Bu benim için büyük kazanç. Yani işin bu tarafını kazanç olarak görmediğiniz zaman olmayacağını kayıp olarak gördüm diye eleştirir iseniz adamı kaybetmeye başlarsınız.

[14.14] Al bu işi yap ama dar boğaza geldiğinde birlikte olalım. İsteddiğini yapabilirsin, hata, istediğin kadar yapabilirsin ama durma. Bir arkadaşımız işe alındığında o, ben burada hata yapacağım korkusuyla çalışmaz. Bence burada yatıyor en büyük neden. Çünkü bir şeyi korkarsanız yapamazsınız. Burada hiçbir arkadaşım o korkuyla yaşamaz. Dolayısıyla biz vardığımızda, ya şunu da şöyle yapsaydık diye tecrübemizi paylaştığımızda, onu çok rahatlıkla ‘haa çok güzel oldu’ diyerekten yapabilir. Yani bunu şey olarak algılamaz aa ben yapamadım, şöyle oldu diye algılamaz. O yüzden de gün geçtikçe o arkadaşımız daha güzel, daha özgün, daha doğru tasarımlar yapar.

[29.18] Ben bu araca böyle bir fonksiyon ekledim, ne dersiniz diyor, bakıyoruz, çok aklıma yatmıyor. Yalan yok. Direk kafadan çalışmaz bu sistem ama şimdi çalışmaz desem çocuğa, bir şeye benzemeyecek. Şu tekil bir proje var diyorum şu projede bunu uygulayalım. Uygulayalım ve üzerinde de revizyona ihtiyaç duyarsan da gerekli tüm yetkiler sende istediğin tüm revizyonu yapabilirsin. Bir kere arkadaşım onu yaptıktan sonra, onun oraya olamayacağını öğreniyor, olmayan şeyin nasıl çalışacağını

zorlayarak öğreniyor, takıldığı yer olursa zaten ben koçluk yapıp çözüyorum bir şekilde hallediyoruz, çünkü ömrüm problem çözmekle geçti mutlaka bir şey geliyor aklınıza o anda.

[30.40] Yaklaşık bu işi yaparken 20-25 tane çok büyük hata yaptık. Bir daha yapmayacağımız hatalardan bahsediyorum. Yani başka hatalar yapacağız ama en azından bu hataları yapmayacağız. Çünkü bu kadar kısa zamanda her defasında doğru kararlar alarak ilerleyemiyorsun.

[30.21] Burada umut barındırdığım bir arkadaşı cnc makinelerine bağlı 3 tane mavi yakalı var, o arkadaşlardan sorumlu tuttum. Ve çok sıkışık bir proje döneminde, onun o ekibi idare etmesini istedim. Sorumluluklarından bir tanesi makinelerin 7- 24 çalışabiliyor olduğunun garantörü de olması, bu anlamda bakımlarını da yapması vs. gibi. Benim mavi yakalı arkadaşlarım 20-25 yıllık tecrübeli arkadaşlar ve makine bozulduğu anda normal şartlarda iki saat içerisinde o makineyi çalıştıracak aksiyonu alırlar. Ama ben organizasyonu daha tanımlı olsun diye o beyaz yakalı arkadaşına o ekibi bağladım ve dedim ki yönet. Bu arkadaş makine bozuldu ve normalde benim mavi yakam aksiyon alacakken dur dedim alma dedim onun yapması gerekiyor. Ama o çok inanılmaz şey bir süreçti, sıkışık bir süreçte onlar görüşmek istiyorlar, sonra bunu sıkıştırmaya başladım, ne yaptığını anlamaya çalışarak. Gördüm ki benden ne yapmasını gerektiğini öğrenmeye çalışıyor ve bir şey ortaya koymuyor, sürekli sorularla bunaltıp diyeyim, makinenin iki gün yatmasını göze alarak, onun doğru aksiyonu alana kadar uğraşmasını sağladım. Tüm süreç tamamlandığı zaman da, makine tekrar çalışabilir hale geldiği zaman da, one-to-one alıp, hatalarının neler olduğunu anlatıp, nasıl aksiyon alması gerektiğini anlayıp anlamadığını anlamaya çalıştım ki anlamıştı. Ondan sonra o makineler konusunda kendisini çok inanılmaz derecede geliştirdi.

[34.19] Öğrenmenin durması, yaratıcılığımın ölmeye başladığını hissetmek biraz konfor alanının dışına çıkmak istedim, o yüzden ayrıldım. O konfor çünkü beni memur yapacaktı yani. (...)[34.20] Monoton olmaya başladığı zaman, bildiğin şey tekrar

önüne gelmeye başladığı zaman, ya şöyle bir şey var, imm, mesela bonfile güzel bir yemek, her gün bonfile yemeye başladınız. Bir süre sonra ööğh der insan. Yani o rutini biraz bozmak gerekiyor. ... Bazen uzaklaşmak gerekiyor.

[32.33] Şu an ben öğreniyorum ve şirketin bana yatırım yapmasına yönelik mesela eğitim taleplerim oldu. Bu anlamda da geri dönüşler alabilirsem bu alışverişi (çalışan-şirket) güçlendirecek bir şey çünkü (...) Şu an bulunduğum yer itibariyle besleniyorum. Evet çok ciddi efor sarf ediyorum, olabileceği kadar kazanıyorum diyorum, kesinlikle çok kazandığımı düşünmüyorum. yani çok kazandığımı derken olması gerektiğinden fazla değil eksik bence ama bunun yanında bunun aynı zamanda bir okul mantığı çünkü ben ciddi bir toprak vardı üzerimde, 7 yıllık bir alışkanlığım üzerine bir adım atmam gerekiyordu, ve şu an çalıştığım firma bu anlamda benim için 2-3 adım birden atlamış gibi oldum çünkü gerçekten okul gibi bir alana denk geldim. Okuldan kastım da dediğim gibi o Ar-Ge seri üretim ve perakende, nihai tüketici, o mağazanın bulunduğu alan içerisindeki o ürünün bütün kanallarını takip ediyor olmam yani.

[33.7] Ben bir şeyler öğrenmekten zevk aldım. Orada üretimi görmüş oldum. Yani en başta daha zevkli çalışıyordum çünkü bir şeyler öğreniyordum. Sonra işte rutine binmeye başladı.

[29.101] Patron bana bu ayın başında elli iki tane aracı nasıl üreteceksin diye sorduğunda, dedim aşağı inip ekibimle konuşacağım. Ekibim bu aracı üreteceğiz dediği zaman zaten ben üretmiş sayarım işime bakarım. Bu kadar yani onlar inandıktan sonrasının geriye kalan önemli değil. Benim de derdim bu bütün olay inanç üzerine bütün olay saygı üzerine yani farklılıklarımızı da zenginlik olarak alırsak çok kolay.

[31.25] Tek başına çözebilme imkanın yok hiç bir problemi. O kadar büyük oluyor ki o problemler, tek başına çözemeyeceğini bildiğin için biraz sen de şekilleniyorsun, şekilleneceğini bilerek yola çıkıyorsun. Ve sonuca öyle varıyorsun.

[33.11] Tasarımda şey olarak bence hani fikir çeşitliliği ürünün şey kalitesini etkiliyor, yenilikçilik ve hani araştırmada olsun fikir geliştirmede olsun ne kadar çeşitli olursak (işbirlikçi) ürüne o kadar çok şey katmış oluyoruz gibi geliyor, bilgi ve yenilik.

[24.43] Sen tek başınayken ürettiğin fikirler, ekiptekinin her zaman için biraz daha altında kalıyor. Yani ben ona inanıyorum. Çünkü hani şey oluyor, farklı disiplinlerden gelen insanlar, farklı fikirler ileri sürüp, onların komple birleştirildiği daha iyi bir ürün tasarlayabiliyorlar. Ben ona inanıyorum. O şekilde daha da eğleniyorum zaten. Onu o yüzden tercih ediyorum.

[29.93] ‘Nasıl süreci iyileştiririz’i ortak baktığınız sürece sorun yok. Çünkü eğitim farklılıklarımızın en güzel tarafı şu benim bilmediğim birçok şeyi adam biliyor. Anlatabiliyor muyum? Mesela renk uyumunu adam benden daha iyi biliyor. Bunu da avantaj olarak niye kullanmayım hazır birikmiş bilgi var orada. Niye almayım.

[21.24] Biz orada sonuçta tabi ki profesyonel olarak, meslek olarak her birimiz bakmaya çalışıyoruz ama ister istemez aslında bireysel, son kullanıcı olarak da fikirlerimiz şekilleniyor. Ne kadar çok insan orada bulunup fikir verecek olursa, aslında o kadar daha gerçek fikirlere ulaşma ihtimalimiz daha çok. Dolayısıyla da her bir araya gelindiğinde farklı farklı insanlardan farklı farklı fikirler çıkmış oluyor. Bunların her biri masaya yatırılıyor, bazen bazıları çok saçma bulunuyor, bazen çok uç ama aslında niye olmasın deniyor. Dolayısıyla bence farklı gözlerle farklı alanlardan insanlar yorumlar katıyor.

[21.25] G: Peki sence alternatiflerin böyle çok olması tasarım sürecinde sorun yaratan bir şey mi yoksa verimli mi? N: (...) O an onları yaşarken hep bir zaman telaşı içerisinde olduğumuz için yani uf çok fazla bunlar falan, gerek yok bu kadar diyoruz ama aslında öyle değil. Yani nihai ürün çıktığında onların hepsinin bir değer kattığının farkına biz de varıyoruz, öyle söyleyeyim.

[31.14] Elde ettiğimiz üründe birçok kişinin farklı konularda yeteneği, emeği söz konusu. Yani oradan bir kişi onu eksik yaparsa ya da yanlış yaparsa ya da bilmiyorum başka türlü bir hatalı yaparsa sonuçta o tasarım bir şekilde gidip geri döner. Herkes

motivasyonlu çalıştığı zaman o sağlıklı bir neticeye ulaşıyor.

[30.20] Bir defa benim inandığım şey, karşı taraf bir şey vermiyorsa mümkün değildir. İlki bu. (...) Yani vermeyi istemiyor ve vermeyi istemediğinin farkında olan tiplerden bahsediyorum. Bu arkadaşlardan bir şey alamazsın bu arkadaş bir kere işe alınmışsa ondan kurtulmaya çalışmak gerekir diye düşünüyorum.

[7.9] Neticede insanız biz makine değiliz, işin içinde duygusallık da var, bu duygusal iletişim de insanlar arasında önemli, bu duygusal iletişimi ne kadar sıkı tutarsak (...) böyle bir ekibin içinde bir parça olduğunu hissedecek, bunu hissettirecek bir alt yapının olmasını ben önemsiyorum.

[7.15] En büyük şey, yaşadığınız heyecanı şu kağıdın üstündeki (sürece katılan) herkesin yaşamasını istiyorsunuz, olmuyor ama. En büyük sıkıntı o yani.

[29.100] işin tekniği zaten ehil adamlar tarafından bizler gibi çözülür. Aslolan psikolojik yönetimi. Bunu becerebildiğiniz zaman çok basit.

[3.13] Yani yapılacak adımlar belli ama ben şuna inanıyorum, her halükarda ne kadar yol haritanız belli olursa olsun, aşamalarda kaydedeceğimiz hız, performans, verimlilik, ilişki yönetimiyle çok alakalı. Yani biz bunu yıllardır yaşıyoruz. Yani siz istediğiniz kadar bir şeyleri sabitleyin, istediğiniz kadar sistemsel olarak yapın ama yani 1. aşamadan 2. aşamaya geçerken x kadar zaman ve kaynak harcamanız gerekiyorsa, eğer ilişki yönetiminiz de iyiye, insanları bu yönde de eğitebiliyorsanız, operasyonel, organizasyonel kurguyu da bu şekilde yapabiliyorsanız, bu işi yönetebiliyorsanız, x-1, x-1 şeklinde harcadığınız kaynak, zaman, size artı olarak, karlılık olarak tekrar geri dönüyor. Ben çok önemli olduğunu düşünüyorum yani tecrübelerime dayanarak.

[5.6] Olumsuz şöyle; aslında bu bizim genel şeyimiz, bir süreçten bir sürece geçerkenki aksama: mesela ürün üretildi teşhiri yapılacak, orada aksama yaşıyoruz. Yani bu süreçlerin birbirini ok ardı ardına tetikliyor olması lazım ve herkesin gerçekten de aynı sorumlulukla, yani projeyi hiçbir gün atlamadan bitirmeye

odaklanıyor olması lazım. Çünkü ürün ve tasarım yönetimi ürünlerle yaşadığı için açıkçası, burada çok daha hassas davranıyor ama hani samimiyetle anlatıyorum, diğer departmanların da, diğer birimlerin de aynı hassasiyetle davranması lazım. ...herkesin gerçekten uyum içerisinde ve gidip en sonunda satış noktasındaki arkadaşımızın da bu ürünü anlatmak adına aynı heyecanı duyuyor olması lazım. Zaten bunu yaratmak zor, bunu yarattığınız bütün projeler başarıya ulaşıyor, bu eksildikçe de projenin başarıya ulaşma ihtimali de eksiliyor. ...O zaman bizim için çok önemli olan bir şey diğer için üçüncü işi olabiliyor mesela. [5.6] İşte ama o ruhu geçirmek önemli bence hani o ruh geçerse devam ediyor, geçiremezseniz o geçmeyen halkada takılıyor.

[4.10] Hani birisi onaylıyor sonra öbürü onaylamıyor, terminler sarkıyor, herkes kendi önceliğini belirli noktada belirliyor. O işten ziyade kendi işlerinin öncülüğü devam ediyor. Yani bence öğreneceğiz bunu, hani iyi bir, daha iyi bir orkestra şefiyle belki – yeni yapılarda çünkü bazı değişiklikler oluyor – gelecek için biraz daha umutluyum. Bence başlangıçtayız, hani iyi adımlar atıyoruz ama daha iyisini yapabiliriz yani ben öyle düşünüyorum.

[31.24] Bir haftada yapılabilecek bir şey 2-3 haftayı alabiliyor o kararsızlıktan dolayı. Hani o benim dediğim olacak, öbürü benim dediğim olacak, arada kalınan kararlarda illa bir karar çıkıyor ama belli bir süreç alıyor o kararın çıkması. Çünkü karar alınamazsa bir üst mercieye taşınıyor o karar. bir üst mercideki kişi de o kararı alıyor gerçekten de iyi ya da kötü bilgileri veriyorsunuz ve o da bir karara varıyor. Herkes o karara saygı duyup yapmak zorunda kalıyor.

[31.11] İş arkadaşlarının birbirleriyle ilgili motivasyonları, yani herkes başka biri için bir şey yaparsa sonuçta o da ekip ruhunu daha da canlı tutacak bir şey haline geliyor.

[32.27] İnsanlar önemli. Ekip de çok önemli. Ekip motivasyonu da çok önemli. Orada biri beni düşük gördüğünde hadi gel bi' kahve içelim diyebildiğinde de ben bir anda günlük motivasyonumu sağlayabiliyorum.

[35.3] İş arkadaşlarımız hep genç olduğu için üniversitenin bir uzantısı gibi düşünüyorum ben. Zaten beraber dışarıda görüştüğüm, beraber spor yaptığım ya da bir aktivite yaptığımız insanlar. o yüzden bu motivasyonu artırıcı bir şey yani. Ya yeri gelince goygoy yapabiliyoruz işte muhabbet edebiliyoruz vs. O açıdan güzel aslında hani bi' rekabet yok, dost ortamı, bence motivasyonu artırıcı bir şey bu. ya da çekilir kılan bir şey (güler) diyebilirim.

[24.15] Buradaki ekipler birbiriyle gerçekten çok uzun süre çalışmış insanlar, en az 5 yıl, 10 yıldır böyle süreçlere dahil olmuş insanlar, öyle olunca onlar zaten birbirlerinin analizlerini zaten çok daha önceden yaptıkları için hani uyum içerisinde çalışan insanları zaten ekipleştiriyorlar yöneticiler ciddi anlamda. Hani öyle olunca ekipler daha uyumlu oluyor. (...) [24.38] büyük kavgalar burada genelde olmuyor yani burada fikir ayrılıkları olup sonrasında orta bir yol bulunabiliyor. İşte o gerçekten uzun yıllardır birlikte çalışmanın verdiği bir aslında olumlu etki.

[22.11] Bazen uyumsuzları da bir araya getiriyoruz. (güler) hem anlaşmayı öğrensinler. Ekipte herkes, şimdi bizim ekip, herkeste farklı bir kafa var, birbirleriyle uyumlu olsunlar mı diye doğrusu çok şey yapmıyoruz, öyle bir şey yok. Zaten çok aşırı kalabalık bir ekibimiz olmadığı için genelde öyle bir, bunlar uyumlu çalışsınlar gibi. Cinslik bazen önemli çünkü herkes aynı kafadan olmuyor. O yüzden proje değerlendirmelerinde işte gidiyoruz, ekipler geliyor, biri cins bir şey söylediğinde de farklı düşünelim. Çünkü aynı kafadan olunca proje aynı kafadan ilerliyor. Bizim ana müşteri kitlesi, herkes var yani.

[23.3] Çalıştığımız kişinin çalışma şekli ve performansı ile motivasyon bence direk ilişkili. Yeni bu şey, şeyden bahsetmiyorum kişinin becerilerinden, yaratıcılığın bahsetmiyorum, süreç anlamında sadece bahsettiğim. Yani sizinle kurduğu iletişim şekli, konuşma şekli, yazım şekli, sorduğunuz sorulara geri dönüş zamanı, yani sadece tarzı da değil, zamanı, bazen tabi ki verdiği cevabın tutarlılığı ya da doğruluğu, mutlaka projenin ilerleyişini etkiliyor.

[29.66] Aslolan biz o bizle olan ilişkileri bitirmeyelim (...) Bu kadar, daha fazlasına gerek yok Gülen Hanım. Anlatabiliyor muyum? Yani bir şey olmasına gerek yok. Bu kadar basit daha fazlasını karıştırır. Aslolan biz nasıl destek oluruz. Herkes birbirine nasıl destek olur? O zaman bir şey çıkıyor ortaya (...) [29.96] egolarını bir kenara bırakıp, simgeleri bir tarafa bırakıp, dikenleri bir tarafa bırakıp oturup toplantıda keyifle çalıştığınız zaman hiç kimseyi rencide etmeyecek ortamlarda konuştuğunuz zaman iş çıkıyor.

[21.3] İyi ilişkiler ve birbirini iyi anlayabilen insanlar denk geldiğinde kesinlikle problemler de daha hızlı çözülüyor. En azından konuyu sadece iş olarak görüp kişiselleştirmediğin müddetçe, karşıdaki insan da eğer öyleyse daha hızlı ilerliyor. O yüzden bence burada kişilerin de önemi var. [21.4] mesela işte beklentileri, zorladığındaki verdiği karşılığını, ona yapılmış olarak kasti herhangi bir zorlama olmadığını düşünerek olumlu bir şekilde geri dönüyor ama zaman oluyor ki kişiden kişiye veya insanın duygusal durumuna göre değişen şeyler oluyor ve bu zorlamaları bu zaman kısıtı içerisinde baskıları insanlar bazen kişisel olarak algılayabiliyor. O zaman işler daha çok çıkmaza giriyor. Bu şeylerde çokça yaşanıyor, hep zamana karşı yarıştığımız için ve herkesin başka işleri de olduğu için bazen bunlar bu şekilde algılanıyor. Böyle algılanmadığı müddetçe çok daha net gidiyor yani her şey.

[33.1] Eğer o mühendisle muhabbetin varsa ve aran iyiyse proje çok güzel gidebiliyordu. Ama hiç tanımadığın biriye ve sana güvenmiyorsa açıkçası şey oluyordu, imm, iletişim daha şey kopuk oluyordu o zaman.

[7.16] Tasarım, ekibinin parçası. Kopuk değiliz yani, diğer ekiplerde, yani birçok araştırmam oldu benimde, nasıl yapıyorsunuz? Mesela en karşıma çıkan sizin dediğiniz problem, bu iletişim çok kopuk, adam bir şey istiyor, başka bir şey çıkıyor buradan, ya derdini anlatamıyor, ya çıktı şey kötü bir mekanik tasarım çıktısı oluyor ama beklenti böyle deyip sıyrılıyor işin içerisinde filan filan. Bu şey kopuk, ama bizde bu link oldukça sağlam, bence bizi hem hızlı yapan hem başarılı yapan şeylerden biri bu. Ya buradaki mekanik tasarımcı bu kültürle burada bulununca ve zaman

geçirince artık işe biraz daha endüstriyel tasarımcı gözüyle bakabiliyor. Endüstriyel tasarımcı yine aynı çatı altında bulununca, mekanik tasarımcı gözüyle bakabiliyor. Yani birbirleriyle empati kurarak daha iyi çıktılar çıkartmaya çalışıyorlar.

[14.16] Planlama da dahil olmak üzere satın alma da dahil olmak üzere her birimi etkin, canlı tutup sonuca ulaşmaya çalışıyoruz. (...) çünkü biz bundan besleniyoruz. Beslenemezsek çürürüz.

[14.23] Bir ürünün sadece burada kendi firmamız bünyesinde canlı tutmak yetmiyor, karşı taraftaki tedarikçinizide bu heyecana katarsanız, orada hakikaten güzel işler çıkıyor. Düşünün kendi ekibinin motivasyonu ve firmanın motivasyonu birbirini karşılayacak. (...) [14.24] En güzel kısım da en zor kısım da orası ama şükür onları da gidip gelen o dostane işte veya işte o işte buranın hedeflerini anlatırken burada yapılan işler anlatılırken, onların gözünde bir parlıtlı görüyorsunuz ve o parlıtlı o işe yansıyor. Müthiş bir şey bunlar.

[34.2] İçeride şöyle bir şey var: Projeyi biz (vurgular) iyi bir noktaya getirelim, hayır biz (vurgular) iyi bir noktaya getirelim. Bu bölümler arasında böyle bir çekişme olabiliyor. Tabi bu tarz çekişmeler işte dediklerime sebep oluyor: toplantıların verimsiz geçmesine, ondan sonra projenin paylaşılamaması üzerinden yavaşlamasına, karar alınmamasına..bu tarz iletişim projeleri sekteye uğratıyor içeride.

[29.90] Mühendisler sınır şartları içinde yaşamaya alışık. ID'ciler ise 'sınır nasıl dışarısında yaşarız'a bakıyorlar şimdi birisi ormanın dışında yaşamaya alışık diğeri ormanın içinden dışarı çıkmamaya alışık şimdi sen diyorsun ki hadi bunları beraber ağaçları seyrekletirelim her tarafı orman yapalım, biraz da seyrek olsun ki herkes yaşayabilsin. Abi çok zor. Çok zor. Yani bu sefer ormandaki arkadaşlar diyor ki hayır bunlar girmesin içeri. Sıkıntılı bunlar, bunlar bilmediğimiz bir yere çekiyor. Kardeşim öyle bir eğri olur mu? Bizim sac parçayı ben oraya nasıl döndüreceğim, dönmez kardeş yapılamaz. Nasıl çizdin sen bunu sen bunu git bir değiştir.

[30.49] genellikle mühendislik kanadının işlere yaklaşımı şöyle oluyor. En basiti hangisiyse ona gidelim. En kolayı hangisi ise ona gidelim şeklinde oluyor. Yani bu bir eleştiri değil bu arada belki bir noktada öyle yapılması gerektiği de olabilir çünkü biz sürekli yenilik inovasyon yaptırma falan, yani seri üretim yapan, montaj yapan bir ekibin içerisinde mühendislik ve Ar-Ge'de barındırıyorsun, benim yaptığım olay ElonMusk'ın elinden çıkmış işte şeyler gibi olacak diye bir şeyimiz yok bizim. (...)

[30.50] Mühendisliğin kendi içerisinde kolay olan yol neyse oraya gitmeye yönelik bir şeyi vardır. Bu biraz daha basitleştiriyor onlar açısından işi, o koordinasyona biz girdiğimizde daha doğrusu o denkleme biz girdiğimizde iş biraz bozuluyor. Çünkü biz biraz daha departman olarak - nasıl söyleyeyim - yoruma dayalı bir iş yapıyoruz çünkü benim ya bu olsun dediğim şey daha yoruma dayalı ama mühendisliğin yaptığı şey daha matematiksel olarak doğrulanabilir bir şey. (...)[30.51] Aero'cu diyor ki burasını böyle yaparsak diyor 2 count kazanıyorum diyor. Sen bir şey kaybediyor musun diye soruyor karşı tarafa, diğer karşı taraf şikayet etmiyorsa uzlaşıyorlar bunlar zaten kendi aralarında. Kaybediyorsa da bir orta yol bulmaya çalışıyorlar. Biz girdiğimiz zaman bu denkleme, iş biraz boyut değiştiriyor. Çünkü biz yoruma dayalı bir şey söylüyoruz. Diyoruz ki 1 count kazanıyorsun ama bu satmaz diyoruz mesela ya da bu güzel değil diyoruz. Güzel değil şey bir ifade değil yani burası için güzel değil de kaç birim güzel değil? Değil işte güzel değil yani evet hayır 1 -0 şeklinde çalışıyor orda onlarda şeyler var işte daha böyle benim dediğime daha yakın ona bilmem ne bağlı olarak bilmem ne vesaire falan gibi bir durum var. Bu sebepten dolayı dizaynın içinde olduğu yerlerde bir çekişme ya da bir şey yaşanıyor çünkü bu ölçülebilir bir şey olmamasından kaynaklı ve bizim elimizde daha zor ikna ikna işlemleri daha zor silahlar var.

[23.9] Şu an çalıştığım fabrikada en basit ürünler üretim açısından en sevdikleri tasarımlar mesela. Hani böyle bir şey söyleyebilirim. Üst segmente geçtikçe daha zorlaşan, daha zaman alan ürünler ortaya çıkıyor. Bunu üretim açısından söylüyorum, yani üretimi yapan departman açısından söylüyorum (...) günde adetli çalışıyorlar, belli adet, belli dakikalar ve her şeyleri belli. Bu ürünler zorlaştıkça, onlar ürüne tabi

bir tasarım, bir satış, işte böyle bakmıyorlar. Sonuçta bir malzeme geliyor ve onu bir ürüne çeviriyorlar. Bir süre var, o süre içinde 10 işçi bu kadar ürün yapacak. Çok böyle daha matematiksel bir süreçte kafalar çalışıyor. Dolayısıyla hani o ürün güzel olmuş, çirkin olmuş, rengi işte kırmızı olmuş, kenarında 5 radius olmuş onları ilgilendirmiyor. Dolayısıyla ne kadar üst segment ürün gelirse, yani boyaların gireceği, el işçiliğinin arttığı ürünler geldikçe onlar mutsuz oluyorlar ve yapmak istemiyorlar. Onların yapmak istememesi de departman olarak bizi zorluyor. Çünkü işe bir angarya olarak bakıyor. Motivasyonunu düşürüyor, bizim de motivasyonumuzu düşürüyor. İşte yaparız dediğimiz, sonra ‘yok ben bunu yapamıyorum’ a dönüyor. Yani üretimin yapamıyorum dediği bir şey, ürünün çıkmıyor olması demek. İşte burada yine kavgalarımız başlıyor. İşte tabi ki yaparsın, yok yapamam, işte yok bu kadar zaman, bu kadar adam falan gibi mesela üretimle de bu diyaloglara giriyoruz.

[23.4] Diğer departmanlarla sıkıntılar yaşadığımızda baya geriliyoruz. Satın alma bunlardan bir tanesi. En çok işte eksik bilgi gönderdiğimi söylüyor ama ben göndermediğimi iddia ediyorum. Mesela işte ben bazen diyorum ki ‘yok bu uğraşmak istemediği işi böyle yapıyor’ diyorum. Hani benim beklentim daha farklı satın alma departmanından. Belki o da kendi açısından onun onunla ilgilenmemesi gerektiğini, ya da onunla ilgilenecek elemanın olmadığını düşünüyor. ...Üretimle de aynı şekilde. İşte onu verdim, bunu verdim, onu bilmiyordum, bunu biliyordum gibi böyle işte veri eksikliğinden ya da herkesin, dediğim gibi aslında konu, herkesin kendi işine odaklanması. Diğer departmanın işi her zaman onun için ikinci planda. Üretim önce üretmek istiyor, işte benim ürünümle ilgilenmek istemiyor. Ben de önce benim ürünümle ilgilen, ona göre üretim planı yapsın istiyorum. Öyle konuşmalarımız, çatışmalarımız oluyor.

[21.20] O tasarımın üstünde bizim, yani benim, ürün geliştirmeci olarak oynamalar yaparak değiştirmem beklendi. Tabi ki o değişikliklerden tatmin olmadılar. Çünkü hani bir yandan da tabi ki departmanların da egosu oluyor yani sadece bireylerin egosu yok. O zaman o, onların tasarımı olmuş olmuyor yani benim müdahalemlerle geliştirilince. Sonra yeniden tasarım yapıldı. Dolayısıyla bu arada çok zaman

kaybedildi. Daha çok sıkışmış oldum tabi ki. Böyle süreçler de olabiliyor.

[23.2] Burada ürün yönetimi-tasarım çatışması başlıyor. Hani kim daha baskın çıkarsa bazen o karar verebiliyor. Yani şimdi tasarımcı kırmızıyı beğeniyor ama pazarlama aslında kırmızının hiç satmayacağına inanıyor. Mesela bu çok büyük bir çelişki noktası. Ama dediğim gibi tasarımcının baskısı da muhtemelen şeyden geliyor, yani prestijli bir şey, yani gerçekten tasarım işi sunmak istiyor. Ama hani bir yerde de veriler ve gerçekler var. Satamayacağına inanıyor. Valla biraz güçlü olan kazanıyor diyebilirim bazen. Böyle şeyler de yaşıyoruz hani, güçlü olan, ne anlamda güçlü olan, hani o belli olmuyor. Ürün yönetimi çok baskın çıkarsa iptal ettirebiliyor. Ama tasarım departmanı da benim ürünüm, bu böyle olacak derse de bazen o noktaya gidilebiliyor.

[30.1] Dizayn ben bunu böyle istiyorum diyerek kazanamadığı gibi işte başka bir departman da ben bunu böyle istiyorum diye kazanamıyor. Herkes kendi sebeplerini ortaya koyuyor. Biraz bence motivasyon kendini geliştirip o tartışmaların içerisinde doğru şeyleri bulmanın keyfi o motivasyonu yaratıyor. (...) [30.3] Aslında insanlar inandıkları için değil kendi kalelerini korumak için bu savaşların, rekabetin içerisinde buluyorlar kendini. Dizayn olarak bizim bu anlamda bulunduğumuz noktayla - yani ürünün güzel gözükmesi - ürünün bizim altını doldurduğumuz değerler düşünüldüğünde, müşterisini ve tasarımcısını mutlu etmesini bekliyoruz. Bizim peşinde olduğumuz şey bu. (...) [30.4] Aslında kendi kalesini korumaya çalışmak çok güzel bir motivasyon ögesi. Yani dizayn olarak dizaynın kendi yapmış olduğu işi koruyabilmek için onun altını doldurmaya çalışması, bunun için de şunun çalışması yani çünkü gelebilecek onbinlerce soru var. Bu sorulara hazırlıklı olmak adına doldurmaya çalışması kendini ya da tasarımın zayıf yanları varsa bunu güçlendirmeye çalışmasını bir motivasyon aracı olarak kullanıyorum.

[30.13] Onlarca mühendislik departmanı var, her birinin kendi skor kartları var, her birinin ulaşmak zorunda oldukları hedefler var. Hiç kimse hedefine %100 ulaşamıyor çünkü zaten birinin hedefine ulaşması başka birinin hedefe ulaşamaması anlamına geliyor. O yüzden biraz şey gibi bir durum yani hani hiçbirimizin dediği olmayacak

ama hepimizin dediği biraz olacak gibi bir durum var ortada. Bunda o kadar fazla etken var ki hani her bir departman çalışanın o işi yapmak isteğinden tutun da, o departmanın müdürünün diyeyim ya da yöneticisinin karakterine kadar hani nasıl pozisyon aldığına işte yani aslında aşağı yukarı her toplantı bir strateji savaşı şeklinde geçiyor. Herkes kozlarını topluyor geliyor orada bütün mermilerini harcamayabilip birbirlerini ikna etmeye çalışıyorlar, bu tamamen kavga dövüş şeklinde ilerlemesi zaten mümkün değil çünkü bir dahaki projede yine aynı ekibin hep beraber çalışması gerekiyor. Dolayısıyla işte hakemin iyi olması, şeyin, gerçekten gereksinimlerini karşılayacak kadarını yapmam ve ortaya koymam genellikle istediğimi almamda etkili oluyor.

[10.3] Yöneticilerimiz, takım liderlerimiz daha doğrusu Metin Bey – kendisiyle görüştünüz zaten – Metin Bey bizi her anlamda yönlendiren ve bize fikir veren, rahatlıkla, tartışarak, uzlaşarak yönlendirmesini yapan birisi.

[23.15] Proje yöneticisinin ne yapacağını bilmesi en büyük olumlu etken, benim açımdan. Yeni fikirlerinin her şeye göre değişmiyor olması etken, kendi yolunda emin adımlarla ilerliyor olması gerekiyor. Diğer departmanlardan çok etkilendiği noktada gerçekten her şey çok karışmış oluyor. (düşünür) Yani bilgisi önemli. Deneyimi bence önemli o kişinin. Bizde ürün yönetimine farklı disiplinlerden insanlar geliyor mesela yeni giriyor. Daha önce de evet ürün yöneticiliği yapmış ama bambaşka bir sektör mesela. Bence bunlar çok önemli. Yani deneyimli bir yöneticinin, deneyimsiz ya da başka disiplinden gelmiş yöneticiyle - bu iş anlamında, bu sektör üzerinde - çok büyük etkisi oluyor. Çünkü diğer türlü eğer farklı bir disiplinden gelmişse bir yandan da öğrenmeye çalıştığı için ve her yerden, herkesten farklı şekilde bilgi aldığı için, kafasında onu bir de deneyimleyip sonucunu karşılaştırması gereken süreç çok uzun. O da onun karar verme sürecini ve yetisini azaltıyor bence. Hep yönlendirmek gerekiyor.

[34.9] Sonuçta karşınızda seçen adam (yönetici) genelde ar-geden gelen mühendisler. Tasarımdan anladıkları yok. Belki çok eski moda düşünüyorlar. Yani onların

seçimleriyle birşeyler seçiliyor, sizin emeğiniz ölüyor. Bence çok demotive edici.

[29.31] Ben yüreğimle çalıştığım zaman hissediyorlar emin olun. Ona dönüyorlar. Ona dönüyorlar. Ya değilse de şunu yapıyorlar: aralarında barındırmıyorlar. Bunu rahat rahat söyleyebilirim. Şöyle söyleyeyim: mesela şöyle söylüyorlar, arkadaşım katkı sağlamamayı düşünüyorsa bir tanesi – proje ekibindeki herhangi bir arkadaşım – o projeye katkı sağladığına inanmayıp rahatsız oluyorsa hemen birbirlerini eleştiriyorlar. Ya bir dakika sen nasıl yapıyorsun böyle bir şeyi, bu adam bak işte bizi böyle koruyor, böyle münakaşa ederken Çağatay Bey’e nasıl mahcup edersin bizi diye kendi aralarında kavgalar çıkıyor. Yani bunu sağlayabilmek vallahi ben bazen kendimi takdir ediyorum. Yani çünkü bu adama bu yapılır mı kardeşim deyip birbirlerini eleştirdikleri çok oldu. (...) [29.53] Sonra bana inanmaya başlıyor bana güvenmeye başlıyor, benim vizyonuma inanmaya başlıyor. Bu üçü olduktan sonra ben adamla yarın sabah çalışmayalım burada deyip toplar ekibi çıkarım. Yani kimse diyemez ki bu ekip nereye gidiyor. Onlar bana inanıyor. Biliyorlar ki çamura sokmayacağım. Anlatabiliyor muyum, yani bu çok önemli. Bunu sağladığınız zaman ekipte bu güveni sağladığınız zaman lider oluyorsunuz. Benim de zaten derdim o, yani benim derdim bu ekibe lider olmak, bu ekibin içinden zaman içerisinde liderler yetiştirmek.

[14.12] Hüseyin Bey’i biz ne kadar çok seviyoruz, iki taş üst üste koyduğu sürece seviyoruz. Hakikaten öyle. Yani bugün Hüseyin Bey, tüm kazandıklarını, tüm fikirlerini - ki çok ileri görüşlüdür - üst üste koymasa ben bu kadar güzel çalışmam belki. O koyduğu için, ben de koyma ihtiyacı hissediyorum.

[32.1] Bu iş için yaratılmış ve gecesini gündüzüne katan bir genel müdür olunca sen tabi böyle çok çalışıyorsun işte (keyifle gülümseyerek anlatır).

[3.15] Buradaki insanlarda şey var, yani vizyonu var işte öyle söyleyeyim yani, çalışanların vizyonu var, bu çok önemli. Başta zaten hani başımızdaki insanın bir vizyonu var. O aşağıya doğru sirayet ediyor açıkçası.

[24.10] Araç sorumlularımız var bizim normalde projeyi yürüten arkadaşlar, bunlar genelde yönetici ya da müdür, şey, mühendis arkadaşlar oluyor, uzman mühendis arkadaşlar oluyor. Hani onların tavrı bile değiştirebiliyor aslında, kişisel tavırları bile, projeye ne koydukları bile değiştirebiliyor tavrımızı. Hani onun orada gerçekten çaba gösterdiğini gördüğümüzde siz de aslında motive olup onunla beraber çalışabiliyorsunuz. Hani birazcık burada bizim Akdeniz bölgesi ya da Türklükle alakalı bir durum belki hani (güler) çok profesyonel olmasa da hani onun tavrı senin tavrını etkiliyor çalışmak noktasında. (...) [24.14] Zaten şöyle oluyor, zaten yöneticinin tavrı otomatik olarak diğer takım arkadaşlarının tavrını da etkiliyor. Yani aslında komple bir projeyi sahiplenebiliyorsun.

[24.13] Eğer ürün yöneticisinin ben gerçekten o projeye çok emek verdiğini gördüğümde, insanların emeklerine karşılık ben de ortaya kendi emeğimi daha fazla koyuyorum mesela. Yani bu ne oluyor? Mesai saati haricinde de o projeyi düşünüp, o projeye ilgili bir şeyler çalışmamı etkileyecek noktalara gelebiliyor tabi ki. Ama eğer şeyse hani projeye gerçekten vermesi gerekeni vermediğini düşündüğüm zamanlarda da bu sefer ben hani yapmam gereken kadar işi yapıyorum tabi ki, o beni şey yapmıyor, ekstralarını etkiliyor onu söyleyeyim. Ekstra çalışmalarımı etkiliyor yani. (...) [24.14] Zaten şöyle oluyor, zaten yöneticinin tavrı otomatik olarak diğer takım arkadaşlarının tavrını da etkiliyor. Yani aslında komple bir projeyi sahiplenebiliyorsun.

[24.44] Sen ekiple çalışmayı tercih ettiğin için ekipteki insanlar da sana karşı daha ılımlı olabiliyorlar çünkü ekiple çalışmayı tercih eden insan, aslında karşısındakinin fikrine de saygı gösteriyor. Öyle olunca dayatmıyorsun, dayattığın yer gerçekten olması gerektiğini düşündüğün şey oluyor.

[29.79] Bakın şöyle söyleyeyim, şimdi kalite iyileştirmek en büyük hedeflerden bir tanesi, üretimi olmanın esası da budur zaten. Şimdi arkadaşlarıma tek tek - hani toplu yapmadım - tek tek bu fabrikada kalitenin kimden sorumlu olduğunu soruyorum. Şu andaki yaydığım dedikodu şu. Net söyleyeyim. Dedikoduyu ben yayıyorum çünkü

soracağım bunu. Şöyle bir dedikodu yayıyorum soruyorum işte, diyorum ki fabrikanın üretiminde kaliteden kim sorumlu? Kalite müdürü direk. Benim arkadaşımın verdiği cevap bu. Peki diyorum Hüseyin Usta kalite müdürü de ben senin gibi düşünmüyorum. Nasıl diyor? Benim düşündüğüm tek şey bizim meydancı Mert var ya bu fabrikanın kalitesinden meydancı Mert sorumludur. Nasıl yani abi diyor? Çok basit diyorum. Meydancı Mert bu fabrikayı ne kadar iyi temizlerse sen o kadar iyi, temiz bir fabrikada çalışırsın. Meydancı Mert'in temiz fabrikasında sen pis iş yapamazsın. Anlatabiliyor muyum? Pis iş yapamazsın. Düzgün iş yaparsın. Sen düzgün iş yaparsan Çelebi de düzgün iş yapar, diğer takımdaki arkadaşın, öbürü de düzgün iş yapar. Bakarsınız kaliteli bir iş çıkarırsınız. Demek ki dedim bu fabrikanın kalitesinden kim sorumluymuş? Meydancı Mert. Bunu dedim unutmayın. Şimdi yavaş yavaş soru cevap bu şekilde gidiyor. Bu en sonunda bana dedikodu olarak gelir nasıl olsa. Meydancı Mert bu fabrikanın kalitesinden sorumludur. Bunu da aybaşındaki toplantıda açıklayacağım.

[29.80] Her aybaşında ikidir yapıyorum çember toplantısı yapıyorum bütün ekibimi topluyorum. Bir daire yapıyoruz. Herkes birbirinin yüzüne bakıyor. Ben buna cem diyorum. ...Bakın dedim arkadaşlar bunun adına cem deyin Cuma deyin bir arada olmak deyin adına ne dediğiniz önemli değil. Asıl olan burada herkesin birbirinin yüzüne bakmak. Birbirinizin yüzüne bakabiliyorsanız birbirinize karşı ayıbınız yok demektir. Demek ki düşman değiliz. Önce dostuz. Çünkü düşmanlar birbirinin yüzüne bakamaz. Eğer öldürmeyi düşünmüyorsa. Peşinden herkes açık yüreklilikle fikrini paylaşıyor. Ve ben orada ayın değerlendirmesini yapıyorum bu ayın işte şu kadar araç ürettik. Şu kadar mesai yaptık. Hedefimiz şu kadar kalite problemlerimiz var. Şu kalite problemlerimiz şu yönde. Bu ayki hedefimizi şu kadar tutturduk. Önümüzdeki ay daha iyi olacağız. Bilmem ne... Yemekleriniz şu şekilde değişiyor. Giriş çıkışlarda şunlarda hassas olun. Varsa soruları alıyorum. Ve bu konuşmayı yaparken de genellikle pas atıyorum. Her zaman atarım yaptığım işte bu. İşte sen ne diyorsun Şenol Usta bu kirliliği nasıl çözeriz diye zarf atıyorum, böyle ara ara refleksler alıyorum. Şimdi bu ayki konuşmanın özü zaten kalite. Yani kalitenin olacağını ben aybaşından beri

işliyorum. Anlatabiliyor muyum ay sonunda fabrikanın kalitesinden kim sorumlu diye sorduğumda soruya istediğim cevap ‘hepimiz’.

[22.20] Proje bizim projemiz değil, yani hepimizin projesi, onlara şeyi aşlamaya çalışıyorum: bu bütün ekibin projesi, senin, benim, hiçbirimizin değil. Önemli olan bizim başarımız, firmanın başarısı. Proje başarılı olması için de sağ olsun arkadaşların hepsi – birisi yapamadığında, yeni biri geldiğinde – hem işi öğretme açısından çabalıyorlar yani.

[29.71] Bir takım oyunu oynuyoruz herkes herkesle konuşacak ben yok biz var. Ben yaptım yok biz yaptık var. Bunun haricinde laf duyarsam bozarım.[29.94] bütün olarak şu ‘ben bilirimcilik’ten çıktığımız zaman herkesin beyin formasyonunu tamamladığını bir eğitim formasyonundan geçtiğini ve mutlaka düşüncesi olduğunu yaşına ve tecrübesine bakmaksızın dinlemeye başladığınız zaman proje çözülüyor. Ama bunun hiçbirine bakmayıp ‘hadi len sen kaç günlük adamsın’la başladığın anda komik durumdasın.

[29.47] Amacımız belli: arkadaş olalım işte, arkadaşız ben o arkadaşlık grubunun lideriyim. Ne yaptınız, işte proje yapıyoruz. Burada 26 günümüzü net geçiriyoruz her ayda sabah sekizde başlıyoruz akşam altıda bazen ne zaman biterse bilmiyoruz. Evimizden fazla beraber vakit geçiriyoruz. Burada yapmamız gereken iş çok basit ya birbirimizin farklılıklarından avantaj çıkarmak. Başka hiçbir derdimiz yok.

[30.19] Yönetici olarak bu motivasyonu arttırmanın ben en önemli şeylerinden bir tanesini, iyi bir insan olmayabilirsin, ağzın düzgün hani düzgün hitap edemiyor da olabilirsin çevrendeki çalışana, sana bağlı çalışanlara ama adalet duygusunu incittiğin anda, bozduğun anda, tam olarak sistemi yıkıyorsun. Çünkü çalışan adam çalışmayan adam zaten belli olur. Çalışan adamdan da verim alamıyorsun ve tam anlamıyla sorgulanmaya başlıyorsun. Ve motivasyon kaynağı olarak bence kullanılacak en önemli şeylerden bir tanesinin adalet olduğunu düşünüyorum. Adil bir şekilde, dürüstçe, herkese yaklaşman davranman gerekiyor. Öbürü de, cezayı da aynı şekilde vermen gerekiyor.

[29.38] Kimseye bağırmadım bakın ekibimde olan hiç kimse bugüne kadar benden fırça yememiştir. Sadece eleştiri görmüştür. Eleştiriye de şöyle yaparım: sence bu işi nasıl yapmalıydık anlat bana. Bu kadar. Yani bütün benim yapacağım eleştiriye o arkadaşım kendine yapar zaten benim yanımda. Anlatabiliyor muyum?

[22.17] Birisi kendi öneriyorsa kendi kabulleniyor. O yüzden o kısım daha insanları hem motive yapıyor, hem daha arkadaş canlısı, bir de bunu şey haline getirmemek gerekiyor hani böyle sert bir yapı değil de ‘bak arkadaşım ben seni biliyorum, yeteneklisin, bunu daha açığa çıkartmak istiyorum’ yani yaklaşımım böyle oluyor arkadaşlara. Çok yeteneklisin ama az kullanıyorsun, bunu nasıl geliştirelim? Hani sence ne yapalım? Bak senin ilerlemen için de bunlar gerekiyor. Yani birazcık da onları şey yaparak hani onlardaki iyi yönleri onlara anlatarak, kötü yönleri de kendilerinin söyleyerek ilerlemesi

[30.60] Beyaz yakada biraz daha işin içerisine psikoloji giriyor. İşte ben mesela sürekli 15 günde bir one-to-one yaparım bütün ekibimle bu one-to-one’larda işle ilgili hiçbir şey konuşmayız. Tamamen onların ve benim – ben de onlardan öğrenirim - onların gelişime açık taraflarından bahsederim hem hayatları ile ilgili gelişime açık taraflarından bahsederim, yaşadıkları olaylarda nasıl davrandılar, yani ne yaptılar niye öyle yaptılar? Ne yapabilirlerdi? Ve yani niye öyle yaptılar gibi ve daha sonrasında onu iş hayatlarına etki etmesini beklerim.

[30.61] Ancak onların hayatlarına dokunduğum zaman iş hayatlarında yaptıkları şeyler değişebiliyor.

[29.36] Hepsinin ben özel hayatını bilmeye çalışırım. Sevgilisi var mı – bekarsa – kaç tane samimi arkadaşı var, arabası var mı, nerede oturuyor, ailesinde kimler var, annesi babası nasıl, kaç tane kardeşi var, doğum günü ne zaman, evlilik yıldönümü aşağı yukarı ne zaman, çocuğunun adı ne – en çok önemsendiğim şeydir – kaç yaşında, kaçınıcı sınıfa gidiyor, ben bunların hepsini tutuyorum. Size samimi olarak söylüyorum. Ben bunların hepsine dikkat ediyorum. İşte hangi yemekleri sever. Bazen – eşim çok iyi yemek yapar – bazen onların sevdikleri yemekler denk gelirse alıp

getiririm. Bazen davet ederim, Mert'ciğim derim işte bu akşam karniyarık yapmış yengen, akşam yemeğine bana gel. Yani bir şey yok ki. Yani çocuk gelip akşam benim evimde yemek yediği zaman, eşini de getirse, kız arkadaşını da getirse daha mutlu olurum. (...) [29.46] Benim ekibimin hepsi ailesiyle benim ailemle birlikte herkes birbirini, tanıyor. Çünkü yazları bir ya da iki defa pikniğe çıkıyoruz. Çalıştığım firmada böyle bir kültür yok. Anlatabiliyor muyum? Yani ben bunu niye sağlıyorum? Hepsinin de dünya görüşü farklı bir tanesi beş vakit namazında uç bir noktada yaşayan bir arkadaşım. Bir tanesi eski devrimcilerden bir tanesi. Ben bu iki adamı aynı masada çalıştırıp aynı projede birleştirebilecek avantaja sahibim. Ve bunu sonuna kadar kullanıyorum.

[30.58] İnsanların hayatlarının içerisinde çok fazla varım onların psikolojik olarak – bunu stratejik olarak yapmadım ama – çok fazla hayatının içindeyim. Yani babasının alzheimer problemi olan arkadaşına manevi ve işte yapabileceğim elimden gelen maddi değil demeyeceğim bir şeyden bahsediyorum işte bu da yani onun bazı devamsızlıklarına göz yumduktan sonra deyim ya da destek olmak diyelim buna, efendim işte eşiyile kız arkadaşıyla problem yaşayan çalışanın o derdini anlatabileceği de bir konumda bir şey sağlamaya çalışıyorum. Ama burada çok zor olan bir şey var, o da ast üst ilişkisini bir şekilde kaybetmeden bunu yapmak bu tamamen kişilikle alakadar bir şey.

[32.22] Bizim düğünümüzde - bu çok basit bir şey belki ama işyerinden çok ciddi bir ekibin orada olması bile ve 'isteyerek' üst yönetim dahil - ya gelmek zorunda değil herkese ulaşamayabilir çünkü herkese aynı oranda yaklaşamayabilir - hani bu bile bir geribildirim gibi geliyor zaman zaman.O benim için yakın zamanda yaşadığım gerçekten beni bir adım daha yaklaştıran bir şey oldu. Çünkü çok beklemediğim insanların gelmesi ve çok özel bir şey hazırlamaları vs. ya da o sürecin içerisinde bana kişisel hayatıma yönelik bir şeyde destek olduklarını görmek.

[30.59] Mavi yaka tam anlamıyla başka bir karakterdeler, onlarla iletişim kurmak ve onlarla iş yaptırmak tam anlamıyla ne istediğini anlatabildiğin sürece alamayacağın

hiçbir şey yok.

[29.98] Ya şimdi aşağıda ekibime şunu anlatıyorum: ihracatta ürettiğimiz ürünler çok önemli. Bunu ilkokul mezunu 20-25 senedir çalışan bir ustaya nasıl anlatırsınız? Yöntemler geliştirmek zorundasınız. Abi yöntem çok basit. Abi diyorum bak bu gavurların paraları çok kıymetli. Bu kadar. Adamın ölçebileceği şeyi verin. Abi bu gavurların paraları çok kıymetli onların bir liraları bizim yedi liramız ediyor abi dedim. O yüzden bu arabaları pırıl pırıl yapmamız lazım çünkü diğer türlü Türkiye içinde sattığımız arabaların bir lira diyoruz bir lira alıyoruz ama orda diyorum onların bir lirasıyla dediğimiz anda bize yedi lira veriyorlar. Vay anasını. ...Adamın ölçebileceği seviyede anlatmak zorundasınız. Başka bir çareniz yok.

[24.37] Herkes aslında kendi fikrinin kullanılmasını istiyor. Orada şey yapabiliyoruz mesela hani çatışan fikirlerde sence bu neden mantıklı ya da neden değil deyip, onlardan nedenlerini ortaya koymalarını istiyoruz. Sonrasında ekip içerisinde bunu bir değerlendiriyoruz.

[29.26] Bir şey ortaya çıkıyor ve o ürünü fotoğraflayıp raporlatıyorum ben, raporlamayı da arkadaşım üst yönetime doğrudan yapıyor – mail ortamında ise mail ortamında, denk gelirse öneri veya sunum toplantımızda, mümkünse oraya dahil etmeye çalışıyorum – doğrudan kendine yaptırıyorum, bana sadece bilgi akıyor. Böylelikle, arkadaşımın varlığından yönetim de biraz daha haberdar olmaya başlıyor. Doğrudan iletişimi açtığım için de, yani öyle kaprisli bir yönetici olmadığım için de bu sefer çocuğun kendine güveni, bana da saygısı artıyor. Çok ilginç bir şekilde, farklı bir şekilde saygı geliyor.

[24.26] Projeyi bazı yönetenler konuyla ilgili çok baskıcı tavır sergileyebiliyorlar mesela. Hani kafalarında bir fikir oluyor, onu sana uygulatmaya çalışabiliyorlar. Böyle olduğu zaman, ben o zaman geriliyorum, hani aslında doğru fikir bu değil, bakın doğru fikir beraber çıkaracağımız şey zaten. Hani senin de fikrin benim için önemli ama aslında doğrusu bu değil, şu yönde ilerlememiz lazım gibi yönler olabiliyor. Onlar mesela beni gerebiliyor. Hani kafasında bir şey oluyor, onu uygulatmak isteyebiliyor

bazen

[24.45] Kuru kuruya dayatmalar var ya – öyle tasarımcılarla da karşılaşıyoruz – onlardan olmamak aslında projeyi daha yükseltiyor. Ben o yüzden egoyu bir kenara bırakmak gerektiğini düşünüyorum ama tabi ki egolarım var, tabi ki her tasarımcı gibi fikrimin kabul edilmesini isteyip dayattığım anlar var. Ben de mükemmel bir melek değilim yani (güler) ama uzak durmaya çalışıyorum, daha iyi bir fikir varsa ona yöneliyorum ya da ‘iki fikri birleştirelim ve ilerleyelim’i yapmaya çalışıyorum diyebilirim.

[32.29] Şirket beni nasıl tatmin ediyor: işte maddi karşılık budur, terfi budur, ya da üst yönetimin sana yaptığı 'evet sen benim adayımsın şu nokta için' diyeceği gelecekçi bir yaklaşımı, yani seni korumacı bir tutumu, ya da senin özel bir gününde seni yalnız bırakmaması mesela o benim için yakın zamanda yaşadığım gerçekten beni bir adım daha yaklaştıran bir şey oldu. Çünkü çok beklemediğim insanların gelmesi ve çok özel bir şey hazırlamaları vs. ya da o sürecin içerisinde bana kişisel hayatıma yönelik bir şeyde destek olduklarını görmek.

[21.10] Bir defa şöyle bir şey var: ben mesleğim açısından endüstriyel tasarımcı olarak baktığımda kesinlikle endüstriyel tasarımcıya değer veriliyor, dediğim gibi yani farklı pozisyonlarda endüstriyel tasarımcı istihdam eden bir şirket.

[21.8] Ben kişisel olarak çok açıkçası nerede çalıştığımı çok önemseyen bir insan değilim. Çok alakasız yerlerde de çalıştım çünkü çok iş değiştirdim. Tabiki sosyal anlamda bir prestij sağlıyor. Nerede çalışıyorsun sorusuna firmanın adını söylediğinde bilmeyen hiç kimseyle karşılaşmıyorsun bir defa. Aa orada mı çalışıyorsun, aaa reklamı gördük falan gibi böyle hani bunlar bile insanı motive ediyor açıkçası.

[3.17] Bugün buradayız, bir gün bir telefon ediyorum ben ve İtalya’da bir tasarım firmasıyla, birileriyle çok rahat konuşabiliyorum, yazılabiliyorum, sürekli iletişim halindeyim. Bu, hem kendimle alakalı hem de çalıştığım şirketle alakalı, buradan biz İtalya’ya gittiğimizde ya da birisi İtalya’ya gittiğinde ya da sektörle alakalı herhangi bir yere çıktığında, firma ismiyle beraber, firma etiketiyle gidiyorsanız, her şey inanır

çok farklı oluyor yani. Onun pozitif etkisini biz hep yaşıyoruz. Tasarım firmalarında da böyle mesela yani biz oralara gittiğimizde tasarımları, ellerindeki direk mevcut olan hazır bir şeyi aslında almıyoruz biz, orada da onlara, sizin evet bu çalışmanız güzel ama bu çalışmanızı bizim fabrikamızın, bizim şirketimizin formatına şu şekilde getirirseniz biz sizinle çalışırız diye onlarla da sürekli istişareler halindeyiz zaten. Ta oralardan başlıyor yani.

[22.22] Tasarım merkezinin kurulması, yanında hep taşınması, tasarımla var olduğunu dile getirmesi, yönetimin desteğinin olması da bence insanları motive ediyor yani şöyle söyleyeyim birçok fuara arkadaşlar gidebiliyorlar, başka yerde çok departman gitmezken burada o tarz imkanlar sağlanıyor.

[32.19] Beni valla şirkette en çok iyi tutan şeylerden biri müthiş bir yemekhane var (gülür) yani o mesela bence bir şirket için çok önemli bir faktör. [32.20] Ya şunu gerçekten söyleyebilirim, Sodexolar falan git başının çaresine bak gibi bir şey benim için ama bizim vegan olan arkadaşlara bile özel yemek hazırlayan (ruhuna dokunan) , çok işini severek yapan bir yemek kadrosu var yani.

[33.3] Firmanın çalışanlarına nasıl davrandığıyla alakalı sorunlar vardı. ...Yemekler çok kötüydü. ...Ben hatta şunu gözlemlemiştim: Orada 6-7 yıl çalışan herkeste bir mide hastalığı vardı. Çünkü kullanılan yağlar çok kötü.

[35.6] Görüyoruz mesela başka firmalardan tasarımcılar fuarlara gider, mantıklı olan odur işte tasarımı siz yapıyorsanız bir yerden beslenmeniz lazım, o da fuarlarla olur işte workshoplarla olur ya da ne bileyim üniversite ile işbirliği olur, herhangi bir şey olur. Bu sefer (bizde) müdürler gidiyor, mühendisler gidiyor. Sonra birbirlerine sunum yapıyorlar. ilginç böyle bir sistemleri var. En basitinden böyle bir şey var yani, işi bilene bırakmak gibi bir huyları yok kurum kültüründe bizim.

[33.5] Şey hissetmişim biraz, o firma için çok değerli olmadığımı, zaten şeyde de görüyordum bunu: yaptığım projelerin sonraki gidişatından da görüyordum biraz. Bazen mesela projem iptal oluyordu, ben bunu aylarca öğrenemiyordum. Çünkü şey yapmıyorlardı, biz bu projeyi durduracağız haberin olsun gibisinden bir şey, hani biz

orada sadece proje geldiğinde estetik çalışan insanlar gibiydik.

[34.16] Karşınızda muhatap olduğunuz insanların işe değer vermemesi mutsuz eden bir detay. Yani nasıl diyeyim mesela, yani bence şey bile mutsuz eden bir detay: bizim yaptığımız tasarımı mühendislere değerlendirmek, sanki onlar tasarım gurusu, onlar işi biliyor ama siz anlamıyorsunuz.

CHAPTER 5

[24.20] O işin tasarım süreci bir aysa beni nerede çalıştığı çok da ilgilendirmiyor. Bir ay sonunda hani bana istediğim işi, istediğim ürünü, istediğim şekilde verebiliyorsa eğer, tasarımı veriyorsa eğer, benim için yeterli. İstiyorsa hani mesaide istiyorsa çalışmasın, evde götürsün çalışsın. O beni hiç ilgilendirmiyor. Benim için, ben ona verdiğim parçanın zaten ne kadar sürede tasarlanması gerektiğini ve hani onun üzerine artı eksi ne kadar zaman alabileceğini zaten belirlediğim prosedürlerim var, o prosedürlere bağlı veriyorum. Tasarım prosedürlerimiz var bizim de kendi içimizde, onlara bağlı veriyorum zaten. En başında, projenin başında anlaşıyoruz, sonrasında o zaman dilimi içerisinde bana tasarımı vermiş oluyor zaten arkadaşlar. Yani o yüzden şey, benim için hani evde ya da başka bir yerde çalışmasının çok bir farklılığı yok. Çünkü dediğim gibi hani gerçekten yaratıcılığın nerede seni bulacağını çok bilmiyorsun. Hani bazen ofiste hiçbir şey çıkaramazken evde yarım saatte bütün günden daha verimli çalışabiliyorsun. O yüzden bizim ekiple ilgili özellikle bir kısıtlama yok.

[21.19] Kendi zaman planımızı aslında o makro planlamanın içerisinde bireysel planlamasını kendisi yapan insanlarız. Mesela bu çok rahatlatıcı bir şey. Çok, beni rahat hissettiren bir şey. Onun dışında sürekli olarak yaptın mı, işte günlük olarak mesela ya da saatlik olarak neyi yaptın neyi yapmadın gibi şeyler sorgulanmıyor. İş tamamladın mı tamamlamadın mı? Bu da güzel bir şey, bu da rahatlatıyor, kendi kendini organize ediyorsun. Zaman konusunda mesela çok şeydir, yani istiyorsan bir saat önce gel, bir saat önce çık işten, çok fazla problem edilmez. Arada bir evden

çalışma özgürlüğüne sahibiz, istiyorsak onu kullanabiliriz. Onlar beni rahat hissettiriyor. Onun dışında tabi ki yani sonuçta iş hayatı, özel sektör yırtıcı. Bu bir gerçek. Bunaldığım ve çok saçma bulduğum şeyler zaman zaman oluyor ama genel anlamda işleyiş, yapı böyle yani. Dediğim gibi bunlar beni rahatsız etmiyor burada ve motive oluyorum bunlarla.

[22.27] Bu stresten kurtulsunlar diye hepsine serbest proje verdim. Tüm tasarımcılar yıl sonuna kadar bir tane serbest proje yapacaklar. Onları da en azından kendi tamamen özgür iradeleriyle yaptığı, hani hiç karışmayacağız, sadece konusunu biz okeyledik, hani tasarım niteliği yüksek mi değil mi diye projenin, onu sundular, böyle bir proje düşünüyorum falan, onları da birazcık o konuda kendi yaptıkları bir projede motive olsunlar, hem daha serbest düşünsünler, işte üretimi de belki yeri geldi üretilebilir olması önemli ama hani böyle daha özgün projeler olması için kendilerine hem TPI'larını da koyduk, yaparlarsa para alacaklar, öyle bir şey yani. Bu da hoşlarına gitti mesela motive oldular o konuda, serbest bir şeyler yapıyoruz.

[21.18] Bizim müdürümüz, departmanın müdürü sadece mobilya üretiminin ürün geliştirme müdürü değil, diğer ürün gruplarının da ürün geliştirme müdürü, altında 40 kişi çalışıyor. Dolayısıyla mesela o çok yoğun, işte biz de tabi ekip olarak deneyimli bir ekibiz. En başından beri söylediği şey şu: siz ne diyorsanız doğrudur, sıkıştığınız noktada yumurta kapağıya dayanmadan bana söyleyin, yardımcı olmaya çalışırım. Ama onun dışında biz özgürüz.

[30.48] Konsept truck ta ben ne dediysem o oldu, biz ne dediysek o oldu. Kimse karışmadı. Kimse karışmadı daha doğrusu. Çünkü karışmaya çalıştıkları noktada bu iş yetişmez diye herkesi püskürttüm ben.

[30.30] Parayı eğer çok abartılı bir şekilde düşük vermiyorsan, ortalamada bir şey veriyorsan, parayla motive edemezsin buna ama işle edebildiğini gördüm. (...) Para işin içine dahil olduğu anda aslında keyif almaktan öte başka bir sebep giriyor, kirletiyorsun aslında o işi öyle düşünüyorum. Ama hiç vermediğinde de kendini enayi gibi hissettiği için kirleniyor. [30.26] Dışarıdan seninle iş yapan herkes senin beş katın

kazanırsa ve bunu sen biliyorsan bu sende negatif bir etki yapar. Ama ben bir ortalamadaysam diğerleri gibiysem, bu bir sanki etki yapacakmış gibi hissedilir ama yapmayan bir şey konumuna geliyor.

[32.35] Bir kere maddi dönüş gerçekten önemli. Yani bu yadsınamaz yani hani ben ne kadar seversem seveyim, gerçekten asıl hayatımı kuramıyorsam ya da yürütemiyorsam, bu benim için sağlıklı bir şeye dönüşmez yani. Ay çok mutluyum çünkü işimi çok seviyorum diyemem. Hepsinin bir dozu, ayarı var sanki.

[24.47] Hani paradan öncelikli olarak hayatımda o işten gerçekten keyif almak var.

[23.19] Tasarım, tasarımcılık aslında zaten zevkle yapılması gereken bir şey. Ama tabi ki bizim ülkemiz – en azından benim çalıştığım, işte olduğum koşullar, pozisyon diyeyim – şimdi maddiyatı hiçbir zaman bir tarafa atamıyorsunuz. Yani en azından benim için öyle. Çünkü çalışmam gerekiyor ve para kazanmam gerekiyor benim temelde. O yüzden tasarımı zaten işte varlıkla gelip bir zevk duyarak yapıyor değilim. O pozisyonda değilim açıkçası. Şimdi öyle olunca zaten temelde işimi yapıp başarılı olmaya çalışıyorum.

[23.13] Performans yönetimi diye yönetim sistemimiz var, yılda 2 dönem halinde yapılıyor. Burada bize hedefler konuluyor, yani hem diğer departmanlarla çalışma hedeflerimiz var, yani tüm şirketin hedeflerinden de sorumluyuz. Aynı zamanda kişisel sorumluluklarımız da var. E tabi bu performans bir gösterge. Yani benim yöneticimin benim performansıyla ilgili bir sonucu geliyor bana. Görüşme de yapıyoruz ve bana bir değerlendirme puanı veriyor. En büyük yaptırım bu oluyor. O puana göre yani şöyle, maddi anlamda da bir yaptırım, bir prim alıyoruz. O prim o orana göre geliyor, ya da zam alıyoruz, o zamlar o orana göre geliyor. Doğal olarak bu bir yaptırım. Yani ne kadar çok üste çıkarsam o kadar zam alabilirim, karşılığımı alabilirim.

[30.24] Kullandıkları bir skor kart var, o skor kartta zaman bazlı olarak senin yılın başında yapacağın şeyler belli oluyor. Bu belli olan şeyleri sen yetiştirip yetiştirememene göre puan ve ona göre de prim ve performans notu ve zam alıyorsun.

Dolayısıyla yine insanları etkileyen şeylerden bir tanesi her ne kadar etkisi bir gün sürse de yine para oluyor yani.

[22.13] Ben şöyle bir şey yapmaya başladım: projesini gerçekten düzgün ve iyi yapan insanları daha motive edici hareket ediyorum. Mesela işte bir fuar olacak ya da bir etkinlik olacak, mesela onlara daha öncelik gibi birazcık torpiller yapabiliyorum. (...) İyi yapanla kötü yapan biraz etkisini alsın istiyorum. Eskiden öyle davranmıyordum ama son 1 yıldır falan birazcık bu yönde, verici olana biraz daha verici. Bu şeyine de yansıyor, maaşına kadar yansıyor bu süreçler. Yani öyle çok insanlara baskı kurmadan projelerini yürütmesine, projeyi sahiplenmesine çalışıyoruz, arada motivasyon konuşmaları yapıyoruz. İşte yemeğe gideceğiz diyoruz, şöyle yapacağız diyoruz, yani öyle bir sürecimiz var.

[22.14] Geciken yine gecikiyor. Ne yapsan gecikiyor yani umurunda da olmuyor hayat. Çok farklı karakterlerde insanlar tasarımcılar, zaten zor, çalışmak da zor, onları öyle kabul etmeye çalışıyoruz işte.

[32.9] (G) Kurumsal olarak bir takdir mekanizması var mı? (B) Prim. Prim alıyoruz. (...) Her ekip ya da her departman bu sisteme dahil değil. Biz o ana bileşkenin parçaları olan ekipler olarak prim sistemine dahiliz. Ve hani hepimizin başarısı. Ya benim başarıım yöneticimi de etkiliyor. Tasarımın başarısı, işte direktörünün başarısı uzmanına da yansıyor.

[24.41] Öneri sistemi dediğimiz sistem de şey, sen mesela araç içerisinde ya da fabrika içerisinde diyelim, ‘neyi değiştirmek istersin’i paylaştığın, bunun bir merci tarafından değerlendirildiği bir sistem var. O sistemin de sana ödül süreçleri olabiliyor. O sistem senin önerini çok beğeniyorsa mesela, bu sana atıyorum hediye çeki olarak da gelebiliyor, ya da hani maddi olarak da gelebiliyor, manevi olarak da ödüllendirmeyle de gelebiliyor hani yılsonunda yaptığımız o ödüllendirmede mesela en çok başarı gösteren öneriler falan gibi onore edecek şekilde sana ödül verilebiliyor.

[24.42] Bir heykelcik falan gibi ödül verilebiliyor mesela hani, o da insanları çok motive ediyor. Çünkü aslında 1000-1500 kişinin karşısına çıkıp o ödülü alıyorsun. Hani ben bu işi yaptım diyorsun aslına bakarsan. Simanı o 1000-1500 kişi tanıyor. Yani ben herkesi tanımıyorum ama fabrikadaki herkes beni tanıyor mesela. O derece olduğu zaman sen mesela şey yapıyorsun, gururlanıyorsun hani benim tasarladığım ürün bu işte! Benim aracım deyip böyle bir duygusal bağ kurabiliyorsun. İşinle de duygusal bağ kurmana neden oluyor bu. Bu olumlu etkiliyor insanları.

[22.12] Bir proje takvimi veriyoruz demiştik ya, proje takvimlerine uymayla ilgili onların hedefleri var. Tasarımcılar bizde prim sistemine bağlı çalışıyorlar. Takvimlerini, projelerini zamanında tamamlama ve erken tamamlamalarına göre para kazanıyorlar (güler) Dolayısıyla onları motive eden bir bu nokta var aslında, çünkü bir hedef maaş alabileyim diye. Performans değerlendirmesi oluyor aslında bu kişinin.

[24.40] Bir proje bittiği zaman kutlama oluyor bizde. Hani müdürün pastalı tatlılı falan, hani bir projede çalışanların, bu arkadaşlar bu projede bizimle beraber emek sarf etti diye öyle bir kutlamalar falan yapılıyor burada. Proje bittikten sonra projeye gelen tepkiler olumlu olsa, daha büyük kutlamalara dönüşüyor iş, ya da daha küçük kutlamalarla hani projede çalışan arkadaşların motivasyonu için küçük kutlamalar yapılıyor. (...) 10 saat çalışma sürecinde 1 saatin böyle bir şey yapılması böyle bir motivasyon olabiliyor.

[30.11] Sıklıkla takdir, ön plana çıkartma, eğer yani karşı tarafa yaptırmanın - yani bana bağlı olan tasarımcıya yaptırmanın - işte onore etme, işte payı geçen herkesi takdim etme şeklinde böyle işte hani çalıştık ve karşılığında da böyle bir şeyim oldu kazanımım oldu hissiyatını yaratacak davranışlarda bulunuyoruz.

[23.20] Tasarımın beğeniliyorsa hani onu böyle daha şey, heyecanla yapıyorsun. Bir an önce olup görmek istiyorsun. Onu nasıl anlıyorsun, dediğim gibi, tasarımla karşı tarafın beğenisinden anlıyorsun hani herkes aa süper olmuş dediğinde senin motivasyonun otomatik olarak yükseliyor. Dolayısıyla projenin daha da iyi ortaya çıkması için elinden geleni yapıyor oluyorsun. Ha bu elinden gelenler ne? İşte

tasarımı, tasarım anlamında güçlendirebilirsin, işte görsellerini alıyorsan daha iyi renderlar alabilirsin – hani sunumunu güçlendirebilirsin – seçilsin ya da olsun diye. Üretim aşamasına geçtiyse birebir her detayıyla ilgilenmek istersin. İşte yolunda gitmeyen bir – atıyorum – senin istediğinden biraz kısa olduysa, onu mutlaka senin istediğin şekle getirirsin. İstemediğin bir renk tonu girdiyse, işte o renge varması için sen de işte bir malzeme bulursun, araştırırsın gibi, böyle gerçekten gönülden, içten, böyle büyük bir motivasyonla yapılan projeler oldu.

[35.8] İçerde ödül sistemi de yok ceza sistemi de yok aslında. Projeyi yapıyorsunuz atıyorsunuz. Yapıyorsunuz, üretiliyor geçiyor. Ya ben bir şey üretildiğinde bile mutlu olmuyorum, belki mutlu olmam gerekir. ...içerde mesela ne bileyim teşekkür edilse ya da gerçekten beğendiğini gösterse insanlar falan, bence o küçük takdir şeyleri motive edici yani. Bilmiyorum maddi kazançtan daha ön planda olabilir bizim jenerasyon için. Çünkü biz bazı platformlarda - open innovation platformları var onlarda - yarışmalara giriyoruz ofisteki arkadaşlarla biraz ek para kazanmak için diyeyim, onda mesela yaptığımız şeyler daha inovatif oluyor. Daha kısa sürede baya bi' çeşit çıkartabiliyoruz. Bu open innovation yarışmalarında quantity önemli olduğu için - fikir çeşitliliği - gayet özgür bir şekilde ve orada yapılan işler gerçekten takdir ediliyor hem parasal anlamda hem kişiler tarafından beğenilme anlamında. bu da insanları baya motive eden bir şey.

[30.53] Ben almış olduğumuz uluslar arası tasarım ödülünü - bilmiyorum belki görmüşsündür onu da - benim için hiçbir anlamı yok yani. Ama bunun kurumsal olarak çok güzel dışarıda reklamının yapılması gerektiğini düşünüyorum. Dışarıda çok abartarak anlatılması gerektiğini düşünüyorum. Ama beni kandıramaz yani öyle söyleyeyim.

[7.8] Mümkün olduğunca insanların aynı ofiste olmasının ben çok faydalı olduğunu düşünüyorum. Aynı hacimde olmasını, ayrı odalarla değil aynı hacimde, bu etkileşimi arttırıyor. İlişkileri daha sıcak tutuyor. Araya basit bir paravan girmesi bile orda bir soğukluğa sebebiyet veriyor. Yani bu işler [7.9] neticede insanız biz makine değiliz,

işin içinde duygusallık da var, bu duygusal iletişimde insanlar arasında önemli, bu duygusal iletişimi ne kadar sıkı tutarsak, mekanın böyle bir katkısı var işte, insanlar elbette o bilgisayara oturduğu zaman orayı bir kendine ait özel hissedecek ama şöyle hafif şey yaptığı zamanda böyle bir ekibin içinde bir parça olduğunu hissedecek, bunu hissettirecek bir alt yapının olmasını ben önemsiyorum.

[23.29] Mesela müşteri hizmetleriyle yan yana masadayız. Müşteri hizmetleri dediğimiz departman sürekli şikayetlerin geldiği ve telefonla sürekli dert anlatılıyor. İşte onun dertlere bir cevap verdiği, böyle savaşların olduğu bir departman. Siz bir şey yapmaya çalışırken yan taraftan yani onu duymak ve dinlemek zorundasınız. Bu çok büyük bir şey yani dediğim gibi sizi etkileyen bir durum.

[21.51] Bilgi güvenliği eğitimi falan veriliyor işte bilgisayarların mutlaka kilitlemesi gerekiyor falan böyle işte. Onun ötesinde ürün geliştirme departmanı geceleri kapısı kilitlenen bir departman. Yani oradan sonuçta yenilikler çıkıyor. Bu yüzden biraz daha izole olması kasıtlı olarak yapılmış bir şey.

[21.50] Ya daha güzel fiziksel mekanlarda çalıştım. Bizim fiziksel olarak ortamımız harika değil yani ama kendimize ait ürün geliştirmenin bir odası var. Biz orada kendi çekirdek ailemiz olarak çalışıyoruz. Diğer departmanların çok fazla işte diyaloglarına maruz kalmıyoruz. Bu da güzel bir şey, daha izole çalışma şansımız var. Çünkü bizim biraz izole olup böyle sakin kalmamız gereken zamanlar oluyor. O yüzden ortamın o ayrı olması, açık ofis olmaması – diğer departmanlar açık ofiste çalışıyor çünkü – o da güzel bir şey. Ama yani benim ortamla ilgili böyle – daha güzel ortamlarda çalışıp daha mutsuz olduğum zamanlar olduğu için – çok sorunum yok açıkçası yani, temiz olması yeterli (gülür).

[23.30] Bizim şu an ayrı departmanlarımız. Çok kalabalık da değiliz, ofisimiz işte tek başına. Kendimize göre de dekore ettik, işte müdürümüz bize şey yaptı, ne istiyorsanız alın. Dekorasyonunu da bize bıraktı, dolayısıyla böyle olunca kendimize ait de hissetmiş oluyoruz. Böyle hani bize dayatılmış mobilyalar, dayatılmış duvarlar falan olmadığında, kendi seçimlerimiz olunca, gerçekten olumlu etkiliyor. Yani bundan bir

yıl önce başka bir ofisti, deęiřtirdik ve biz daha ciddi mutlu olduk yani.

[24.3] Aynı binada alıřıyoruz, tabi tabi. Aynı binada alıřıyoruz, ar-ge binamızda alıřıyoruz. Öyle olunca hani iletiřim daha kolay oluyor. Ekibin tamamı aynı binada alıřtıęı için ben direk onların ne yaptıęıyla ilgili gelip bir bakar mısın dediklerinde genelde gidip direk onların bilgisayarını üzerinde bakıp hani orada tartıřıp, ilgili teknik ressamın bilgisayarında tartıřıp orada bir özüm bulmaya alıřıyoruz. Yani aslında toplantı odalarında toplantı yapmamaya bařladık. Küçük ekiplerle bilgisayarlarla toplantı yapıyoruz. O zaman daha dinamik bir Őey oluyor hani ortam oluyor.

[24.17] Biz daha öncesinde mesela belirli bir ofise sahip deęildik bundan dört yıl önce. Sonrasında hani design ekibi olarak ayrı bir ofise ıktık Ar-Ge ierisinde. Ayrı bir ofise ıkıp, daha core bir ekiple alıřıyorsun, o zaman hani Őu oluyor tabi ki, izole olmuş oluyorsun ortamdaki, bu aslında tasarımı da daha hızlı yönlendirmeni, daha iyi konsantreolabilmeni saęlıyor. (...) Tasarım ekibi komple bir ofiste olduęumuz zaman, bir Őey yapabiliyoruz, fikir alıřveriři daha kolay oluyor. Hani bir bakar mısın, burada hani gördüęün bir Őey var mı benim atladıęım, gibi. Ya da iřte ben bu izgiyi bu Őekilde atıyorum hani... flow bir tasarım üzerinde alıřıyorum diyelim, hani daha akıřkan bir tasarım üzerinde alıřıyorum. Benim göremedięim bir Őeyi dięer tasarımcı arkadaşlar gelip aslında hani Őunu Őurada yapsan, Őu izgi devamlılıęını da buradan saęlasan gibi hani beraber konuřtuęumuz direk sketch üzerinde konuřtuęumuz, karakalem sketch'ler üzerinde konuřtuęumuz yöne dönebiliyor. Orada da hani birebir direk iletiřim halinde oluyorsun. Hani bu da ayrı bir ofisin olduęu zaman daha kolay oluyor.

[23.28] Yani gerçekten iřte bu alıřma ortamı, sana saęlanan araç gereer.. ok ağır alıřan bir bilgisayarım olsa mesela, ya da alıřmayan internetim olduęunu düşünsek – dedięim gibi size tanımlanan zaman var ama o zamana sıędıramayacaęımız, o zamana uyamayacaęımız dıř etkenler var, sizden baęımsız yani bir de – benim motivasyonum veya bařarımla ilgili deęil – çok mekanik Őeyler. İnternetim yavař, bilgisayarım yavař, toplantı yapacak oda bulamıyorum.. Benim sürecimi etkileyen her

şey benim motivasyonumu düşürüyor. Bu anlamda çalışma ortamı da bununla direk ilişkili diye düşünüyorum yani.

[31.19] Bir tasarımcının çalışması için gereken bir ortam mesela ışıklandırma, ışığı kapatabilmesi mesela önemli faktörlerden bir tanesi. Tepesindeki ışığı kapatabiliyor mu? Işığı kontrol edebilme fiziki olarak mesela önemli şeylerden birisi. Ben de süreç boyunca öğrendiğim şeylerden birisi.

[24.18] Şu anda hani ekipmanımız şey, direk wacom'un tabletlerini kullanıyoruz mesela. Onların üzerinde direk çizim yapıyoruz. Hani mouse'la çizim yapmaktansa, hani kalemle çizim yapman bile aslında ekipman olarak seni daha ileriye götürebiliyor. Kullandığın programlar gerçekten etkili olabiliyor. Hani normalde burada Catia kullanılırken mesela Sketchbook'ta sketch yapıyoruz. Sonrasında işte Photoshop ya da Alias kullanıyoruz mesela hani kullandığın programlar etkili olabiliyor. Analizlerimizi farklı programlarda yapıyoruz, hani bunlar ciddi anlamda senin sürecini de öne atıyor. Yani geliştiren şeyler oluyor, dönüşümler oluyor.

[34.18] Şöyle bir dünya olduğuna inanmıyorum: ben sabah 8'de tasarım yapmaya başlayacağım, öğlen 2'de tasarım yapmayı bitireceğim... Bunu zaten böyle sunduğunuzda insanlar kendi alternatif yolunu şey yapar.

[24.19] Mesaiyi ben genelde çok önermiyorum kimseye, hani ben ekibimi genelde mesaiye bırakmam. Çünkü hani şey, zoraki olarak burada kalıp mesaide yaptığı işlerden çok, mesela bilgisayarını yanında götürdüğünde ya da işte eskiz defterini yanında götürdüğünde, kafası daha rahat olduğu zaman çalıştığında daha verimli şeyler çıkarıyor mesela.

[24.99] Hani diğer ekiplerle çalışıyoruz ya, işte mekanikçisiyle, gövdecisiyle çalıştığımız, ya da işte ürünü direk üretimde ya da atölyede gördüğümüz süreçler olduğu için işin içerisinde, o süreçlerde de hani gidip direk birebir görüşmen gerekiyor. O yüzden hani mesai saatlerimiz var.

[29.85] Bazen bizim çocuklar diyor ki ya iyi de biz (proje) üretimin üstüyüz. Hayır değilsiniz. Üretimin astımıyız hayır o da değilsiniz. Üretimin paydaşısınız. Destekçisisiniz. Yani bunu iyi konumlandığımız zaman iş kolay. Yoksa sürekli sen benim üstümde sen benim altımdayla uğraşırsak oho onun sonu yok çünkü.

[23.17] Tasarım departmanına bağlıydı Ar-Ge yani ürün geliştirme tasarım departmanına bağlıydı. Bu ne demek oluyor, yani bu şöyle bir şey haline geliyor: Tasarım departmanı ne isterse, ürün geliştirme yapmak zorunda gibi bir şey. Sonuçta müdürü tasarım direktörü. Yani böyle hani çok basit anlamda söyleyecek olursak. Yani onu değerlendiren kişi, aynı zamanda ona ne söylerse sonuçta yani yaparsa artı puan alacağı, yapmazsa eksi puan alacağı kişi. Yani orada tasarım departmanı etkiliydi.

[23.18] Yani kurum kültürü bu anlamda motivasyonu da tabi ki etkiliyor. Yani şimdi ben yapamayacağım bir şeyde ya da olmayacak bir şeyi rahatlıkla tasarım departmanına iletebiliyorum. Çünkü benim de bir bağlı olduğum bir birim var ve ben onun işleriyle ilerliyorum. Rahatlıkla çatışabiliyoruz, kavga edebiliyoruz, yani kavga etmek olumlu anlamında söylemiyorum ama tartışabiliyoruz. Herkes fikrini özgürce söyleyebiliyor. Ama diğer yandan çok baskın bir departman olduğunda – işte ben tasarım departmanına bağlı olsaydım – her şeye evet demek zorunda olacaktım belki de hiç üstüme vazife olmayan işleri yapıyor olacaktım. Zaman kayıpları, motivasyon düşüklüklerine sebep olacaktı bu anlamda kurum kültürü önemli.

[22.28] Mesela bazen ürün geliştirmede oluyor, çok tarifli de geliyor ürünler, işte burasını kısalt, buraya şey ekle, buraya dolap ekle bilmemne. Şimdi tasarımcı bunu yapmak istemiyor. Operatör gibi bir şey. Tamam diyorum sen onu çiz, zaten hiçbir şey yok, bir tane de sen öner diyorum. Hem buranın vizyonu için önemli, çünkü tarif edilen kolay, hem de onları da daha tasarım yapıyor şeyini kazandırmak için önemli.

[4.1] Şirket biraz ürün ve tasarım odağı daha güçlü olan bir şirket, pazarlama odağındansa. (...) Hani üründe çok güçlü, o yüzden ürün ve tasarım yönetiminin de o anlamda daha belirleyici karar alıyor olmasına izin verilmiş olabilir.

[23.1] Normal süreçte az önce bahsettiğim, biz ürün yönetiminden gelenleri dikkate alırız ama bazen bizim de bilmediğimiz nedenlerden ötürü tasarım departmanı bu süreci yönetiyor mesela. Diyelim ki tasarım departmanı bana ürünle ilgili bir karar veriyor. Mesela o noktalarda çatışmalar yaşıyoruz hani sürecimize uymadığına dair. O zaman cidden böyle departmanlar arası gerilimler de yaşıyoruz bu süreç karıştığı zaman birbiri içinde.

[33.4] Orada demokratik bir ortam da yoktu. Çünkü firmada nasıl desem bir hiyerarşi hissediliyordu çoğu zaman. (...) Bana şey yanlış geldi: Biz burada bilimsel bir şey yapmaya çalışıyoruz aslında, mühendislik, tasarım, marketing, bunların hepsi bilimsel ilerleyen şeyler. Hani hiyerarşinin bence daha yumuşak olması gerekiyordu.

[13.8] Ben gelecek hedefim açısından burada birilerinden üretimle alakalı bu parça çıktığında şöyle olabilir böyle olabilir diyebilmek adına o zamanlar bundan 3 sene önce 4 sene önce gireyim çıkayım öğreneyim edeyim nerede yapıyorlar bunu kim yapıyor ismi nedir falan diye o yüzden girmiştim ben (üretime) yoksa kolay kolay talepkar olmazsanız bu işlerin içerisinde tasarımcı sokulmuyor zaten.

[3.14] Bizim kişisel gelişim aksiyonlarımız olsun, insan kaynakları müdürlüğünün bir yol haritası var, bunda bütün hepsi kurumsal olarak hem bölümlerin, hem de kişilerin kişisel gelişimleriyle alakalı aksiyonları ve planları sürekli var. Hatta dün bir toplantıya girdik, orada mesela tekrar yeni bir – [3.14]organizasyonel anlamda – içerideki kaynakların daha verimli kullanılmasına dair program geliştiriyorlar şu anda. Yani kademe kademe bir çalışan kendini geliştirirse, çalışırsa bir üst kademeye, bir üst kademeye, çıkabilecek şekilde bir sistemin daha iyi çalışması adına bir çalışma şu anda yapılıyor mesela.

[32.10] Maddi motivasyonun dışında terfiler.. Karşılığını bir şekilde gördüğün bir yapı var aslında. [32.16] Sen varsın, senin yerine altındakileri yetiştiriyorsun. Hep bi üst yönetim yani bir üstün seni kendi yerine aday gösteriyor. Öyle bir yapı var aslında. [32.17] Benim gerçekten grup yöneticisi olmam için benim altımdaki bir kişiyi yerime yetiştirmiş olmam gerekiyor. Çünkü biraz kapalı bir yapı burası.

[22.25] Yapı olarak dedim ya eskiden (...) Yükselbileceğiniz bir bölüm yoktu. Tasarımcılar sadece tasarımcı olarak kalabildi şirket içerisinde, onun üstü çok farklı birimlere gidiyor, yükselemiyordu. Şimdi burada ne oldu? Benim burada bir yöneticilik kazanmam onlara bir şey oluşturdu, yol haritası oluşturdu. Tasarım sorumlusu, tasarım müdürü gibi pozisyonlar oluşmaya başladı. Tabi bir kariyer haritası oluşması da onlara bence iyi oldu. Ya benim için de hani bu kariyer basamakları burada kalmamı sağladı diyebilirim. (...) [22.26] Şirketin hep bir açılımı var, ben de burada bir kilometre taşı olarak, hani bu ekip içerisinde yer almam - yani yönetim kadrosuna geçmem - benim kalmamı sağladı.. Yoksa tasarımcı kadrosunda kalsaydım büyük ihtimalle buradan uzaklaşabilirdim diye düşünüyorum.

[21.26] Yükselme performansla alakalı mı ondan tam emin değilim açıkçası, performansım iyi ama 3 senedir herhangi bir terfi almadım. Biraz daha bence kişisel ilişkiler yatıyor altında. Bu da işte dediğim gibi bence özel sektörün ne yazık ki bir çaresizliği mi diyeyim ne diyeyim, böyle yani, böyle işliyor.

[30.10] Ekibin mümkün olduğunca güçlü olması ve daha doğrusu ekipteki çalışanların güçlerinin birbirine yakın olması olgusu motivasyon anlamında - kanser olmadan baştan önlem alınır ya önleyici tedavi - önleyici tedavi öyle bir şey oluyor. Eğer karşı hani güçlü olmadığına inandığın kişiyi mümkünse dışına itmek, bırakmaya çalışmak, yolları ayırmaya çalışmak, aslında o kişi için bir iyilik yapmış oluyorsun çünkü aksi takdirde motivasyonu da dağılarak kendisi de ayrılmaya karar veriyor.

[34.8] Bir projeye 5 kişi çalışsın, biri seçilsin. Bu bence güven ilişkisinde bir zedelenme yaratıyor. Çünkü 5 kişiye verilmesi bile beşine birden güvenmediğini gösteriyor yöneticinin. Ya da farklı bir düşünceyle ya ben orada arkadaki düşünceyi biliyorum: ya biz çok çalıştık, daha çok çalıştık, 5 tane proje ortaya koyduk demek için. Halbuki o 5i de ayrı kalitede, güzel projeler oluyor ve 4'üne yazık oluyor. Yani emeğinizin boşa gideceğini bilmek ya bu arada şanssız bir kısır döngüye de girebilirsiniz yani, çok iyi de yapsanız, belki diğer alternatiflerden daha da iyi yapsanız seçilmediği olur yani o projenin.

[30.2] İnsanlar bilirsin rekabeti severler, o rekabeti aslında motivasyonu arttırıcı bir etki olarak çok da kullanıyoruz. Yani kendini anlat, neden bunu böyle istediğini anlat, ikna et. [30.2] İknayı kullanıyoruz daha doğrusu. Bu iknayı kullanırken insanlar, şöyle bir şey yaşıyoruz: ikna etme yeteneği iyi olmayan insanlar giderek eleniyorlar içimizden, yerine birileri yetişip geliyorlar. Çünkü burada sert bir rekabet var herkesin arasında. (...) [30.6] Çok iyi mühendislerin çok iyi tasarımcıların olduğu oldukça sert bir rekabet ortamının olduğu bir yerden bahsediyorum. Herkes çok iyi olmaya çalışıyor o yüzden de bunu bir motivasyon kaynağı olarak kullanıyorlar.

[24.36] Bir de şu var ekibin motivasyonu ile ilgili: mesela 3 tasarımcıya veriyorsun işi, mesela birininki seçiliyor. Ama şuna dikkat ediyoruz hep, diğerindeki fikir daha iyiye, hani ondaki bir detay daha iyiye iki tasarımı birleştirip ilerliyoruz. O ara jüri olayları o yüzden çok önemli burada. Şey yapmıyoruz burada, hani birinde evet çok iyi bir fikir var, ama düzgün sketchlenmemiş ya da düzgün aktarılmamışsa o fikri, öteki tasarımı seçilen arkadaş o fikri kendi tasarımına nasıl uygulayacağına da bakabiliyor. Böyle süreçler de oluyor. O zaman zaten o iki tasarımcının fikri bir arada ilerlemiş oluyor. Öyle mix yaptığımız işler de çıkabiliyor.

[30.9] Eğer dizayn içerisinde gerçekten çok iyi tasarımcılar varsa ve bunlar hele de bir tanesi sürekli fark yaratıyorsa, diğerlerinin çizdiği şeylerden de o tek bir kazananın dizaynına bir şeyler sokup onları da işin şekline dahil etmeye çalışmak bir çözüm olabiliyor bu noktada. Bunu çok yapıyoruz yani yapıyor bu çok yapıyor daha doğrusu öyle söyleyim. Senin de şu fikrin çok iyi, onun da dizaynın burasında olması gerekiyor şeklinde %100 inanmasa da bir şeylere dahil ederek onun motivasyonunu korumaya çalışılıyor.

[13.0] Şöyle, aslında burada ön trim olarak (ben yeni geldiğim için o zamanlar) Zehra Hanım'la Nuri Bey'in ortak çalışması olan bir model vardı, o model üzerinden ön; benim ise ekran tasarımları, direksiyonu vs. bütün içerideki harici komponentleri benim ürünüm oldu. Özellikle direksiyon mesela çok beğenilen bir ürün oldu. Ekranları değiştirdim mesela şu anda tüm makinelerde o ekranlar kullanılıyor.

[29.3] Yeni şeylerde genellikle eski insanların sevmediğim şeyi ‘ya burada bunlar yapılamaz’ gibi kendilerini aşamayan, sığ düşüncelerden kurtulmak zorundaydım, çarem yoktu. Yeni mühendisleri ekibe enjekte ettik. Eskileri bölüm değiştirdik. Bir tanesiyle yolumuzu ayırmak durumunda kaldık. Yapacak hiçbir şey yok. Böyle bir ekibi yeniden sil baştan kurmak zorunda kaldık. [29.33] Bu ekibi eğer ben değiştirmeseydim çok zordu işim. Ekibi bu yüzden değiştirmek zorunda kaldım. Yani baktılar uyum sağlayamıyorlar, yaşayamadılar ekibin içinde. Ekip o yüzden değişti zaten.

[23.16] O kişinin (proje yöneticisi) projeye hakim olması, çalıştığı sektörü en azından malzemeyi tanınması bile o kadar çok şey fark ettiriyor ki. Yani atıyorum bir mdf dediğimde – mobilyadan bahsediyor olursak – onun mdf dediğimde anlıyor olmasıyla, mdf ne diyor olması arasında bir fark var yani. Çünkü şey oluyor, yani o bana mdf ne deyince bende bir ‘mdf yi bile bilmiyor abicim şimdi proje yürüteceğiz biz bu insanla’ olarak başlıyorsun ve kaygıyla başlıyorsun. Çünkü anlıyorum ki ilerleyen süreçte birçok noktada tıkanacağız, ben de bir yandan ona bilgi depoluyor olacağım. Hem işimi yapıyor olacağım, hem de sürekli açıklama, işte atıyorum – çünkü bu işler sadece oturup böyle 5 dakikalık olmuyor – bilmediği bir şey anlatmak için işte bazen malzeme örneği göndermem gerekecek, işte atıyorum fotoğraflar çekip göndermem gerekecek, ikisinin arasındaki farkın üretim detayını anlatmam gerekecek. Böyle benim için zaman kaybı olan – bunu tabi kişisel paylaşım olarak değerlendirirsem tabi sorun değil ama bu – tüm sürecin içinde büyük bir bölümü kaplamaya başladığında beni yavaşlatan, işte projede böyle hani benim bütün enerjimi sadece projeye verebildiğim bir şey olmaktan çıkıyor. Bir taraftan da diğer kişiyi beslemeye başlayan birisi olmuş oluyorsun. O yüzden o önemli. Deneyimli biriyle çalıştığınızda da gerçekten biraz daha hızlı gidiyorsunuz yani.

[30.35] Bizim ekibimiz şöyle bir ekipti: karakter olarak çok sonuç odaklı bir ben vardım - kişisel olarak benden bahsediyorum - taviz vermek tarafı çok az olan yani taviz vermekten hoşlanmayan bir lead designer vardı yani bu işin çizimini yapan bir arkadaş vardı. Ve teknik olarak mükemmeliyetçi bir tane mühendis değil ama işte bu

işin teknik tarafı, fiziksel modelini yapan bir şey vardı bir arkadaş vardı, beyaz yaka dediğim böyle bir şey vardı. Ben burada sonuç odaklı tarafımla taviz vermeyen çocuğu taviz verdirttim, verdirtmek zorunda kaldım defalarca; o teknik olarak mükemmeliyetçi olan çocukla bu taviz vermekten hoşlanmayan çocuk mükemmel bir model yapmak için aksiyon aldılar; tabi ben sürekli zaman olarak ne kadar sıkışık olduğumuzu gösterip günde işte dediğim 5-10 tane design kararı alıp bir yerlere çektim, birbirimizi çekiştirerek böyle onlarda beni çekiştirdiler tabi ben sadece onlarda benim bazen çok kolaycı bir hal aldığım noktada beni şeye çekiştirdiler onlar da, taviz vermemem gereken yerlere doğru çektiler o noktalarda taviz vermedim. Dolayısıyla ekibin yetkinliğinin bu işe - herhangi bir işe daha doğrusu - uygun olması böyle bir şey aslında. (...) [30.36] Eğer bütün ekibin hepsi taviz vermeyen kişilerden oluşsaydı bu iş yetişmezdi. Ekibin hepsi sonuç odaklı kişilerden oluşsaydı bu iş bu kadar kaliteli çıkmazdı. Dolayısıyla ekip kurarken özellikle insanların bu taraflarını o denge kuracak şekilde bir ekip kurulması gerekiyor. Aksi takdirde, ne yazık ki el elde baş başta kalabiliyorsun yani.

[30.17] Senin ekibini yöneten ya da o projeyi yönetici eğer çok kabullenici biriye, hiçbir istediğini alamayabilirsin. Çok agresif biriye de hiçbir istediğini alamayabilirsin. Yani her projenin bir şeyi oluyor bir yolu oluyor. O projede çalışan, o projede görevlendirilmiş insanların karakterleri hangi departmanın neyi alıp neyi alamayacağını belirliyor aslında. Böyle bir değişken bir durumdan bahsediyoruz.

[24.22] Damla: Şu anda daha kurumsal bir şirkette çalıştığım için aslında, bu kurum kültürüne daha sahip. Çünkü daha öncesinde işte pininfarina gibi, Bertone gibi tasarım şirketleriyle çalışıldığı için, tasarımın ne şekilde ilerlemesi gerektiğiyle ilgili hani burada bir kurum kültürü var... Burada hani daha çok Pazar araştırmaları üzerinden gidilerek ürün tasarımları yapmak için zaman veriliyor sana. Hani tasarım çalışmasını ne şekilde yönlendireceğine yönelik kurum kültürü daha fazla olduğu için, hani daha öncesinde de çalışıldığı için, daha rahat çalışıyoruz burada özgür tasarım yapma aşamasında. (...) Bu süreç öğrenildiği için aslında şu anda tasarım süreci daha yolunda gidiyor. Öyle söyleyim.

[21.11] Nesrin: Bir tasarım departmanı var, bir ürün yönetimi var, işte bir şekilde doğru bir karar verilerek, doğru şey için ben çalıştırılmaya uğraşılıyorum. Yani şöyle gelinmiyor bana: sen bir şey tasarla ve onu aynı zamanda geliştir, onu aynı zamanda üret diye bir şey yok. Yani tasarımcının, tasarım yapması gerektiğine inanarak yola çıkıyoruz. Ve ben gerçekten değer katılmış bir ürünü aslında gerçek hayata dönüştürmeye çalışıyorum. Ve böyle tabi ki daha güvende hissediyorsun kendini. Ne yaptığını bilerek ilerlediğini hissediyorsun. Bir bilinmeze yapmıyorsun yani, o anlamda tabi ki önemli yani benim şahsi olarak da etkiliyor.

[23.8] Yani zaten brief konusu çok önemli süreçte. Daha önce çalıştığım tasarım departmanlarında da bu brief'le ilgili çok tartışmalar yaşamıştık. ...daha önce çalıştığım tasarım departmanlarında, belirttiğim gibi gelen brief ne kadar netse yine tasarımın şekillenmesinde o kadar etkili. Yani onların brief hazırlarken eksik bıraktığı nokta mutlaka tasarım konseptinde de eksik olarak ortaya çıkıyor. Aynı şekilde brief doğru olabilir ama tasarım departmanı kendi başına ilerlese, o brief'ten bağımsızlaştığında da yine sıkıntılar çıkıyor. Ben dediğim gibi o brief çıkış noktası çok önemli. Herkesin her şeyi doğru anlaması.

24.5] Biz aslında ürünü tasarlarırken – neyden üreteceğimizi, ne fiyat aralığında olması gerektiğini, bunlarla ilgili brief'i oluşturup buna göre tasarım yaptığımızda daha net, daha doğru tasarımlara ulaşıyoruz.

[24.1] Projenin yapım aşamasında ilk bize briefler pazarlama tarafından geliyor. Satış ve pazarlama. Hani nasıl bir araca ihtiyaç duydukları, Pazar analizleri, onların gözünde bizim müşterimizin nasıl bir ürüne sahip olması gerektiğiyle ilgili briefler geliyor. Ama biz bunlarla yetinmiyoruz. Kendimiz de araştırma yapıyoruz. Ne araştırması mesela? Pazardaki baskın araçla ilgili araştırmalar, hani Pazar lideri araçla ilgili araştırmalar, sonrasında hani sen evet bir ürün tasarlayacaksın ama bu ürünün senin ürün ailine ne kadar uyar olduğuyula ilgili araştırmalar, hani bunlarla ilgili süreçleri topluyoruz ilk analizlerde.

[6.12] Bazen bu talepler geldiğinde bize tam olgunlaşmamış olarak geliyor, çünkü

satış ekibinin pazarlamaya bir baskısı var, pazarlamanın ürüne var, ürünün tasarıma var, tasarımın ür-ge'ye var gibi bir silsile. Dolayısıyla aslında bunun talep tarafına daha fazla zaman harcasak biz aslında bu gel-gitler de olmayacak. Neden, mesela bana bir şey geliyor, bilmem ne çiçek motifinde portföyde ihtiyaç var, müşteriler bundan istiyor diye satış ekibi söylüyor, bu böyle kulaktan kulağa bize geliyor, ama aslında ben dönüp işi yaptığımda ve satış ekibine tekrar sunduğumda diyor ki keşke çiçek olmasaydı. Ama bir yandan da bunu bir üstünden sana aktarana sorduğunda şey diyor, zaman baskısı vardı üzerimde acele istediler bu ürünü onun için ben de acele verdim. Ama bir yandan baktığımda en baştan başlamak çok daha zaman kaybı. [6.12] Halbuki biz o talebi oluşturma kısmında biraz daha fazla vakit geçirirsek ve talebin ne olduğu bana daha net gelirse ben daha doğru iş yapacağım. Aslında zaman kısalmayacak. Onlara ilk başta harcanan zaman aslında biz geç kalıyoruz gibi bir şeyle geliyor ama aslında overall sürece baktığında daha fazla zaman harcamış görünüyorsun.

[31.16] Tasarımcı da bir araç yapacaksa aracın en azından tekerlekler arasındaki mesafeyi diyeyim hani çok temel kurallardan biridir, bu bilgilere sahip olması ya da aracın hangi amaçla kullanılacağı, bu pazarlama ile ilgili net bilgilere sahip olması gerekiyor ki o şekilde yola çıksın. Mesela diyelim ki bu pazarlama ile ilgili bilgilerin gelmediği zamanlar olabiliyor. bazı bilgiler eksik geliyor, tasarımcı kendi tahminen çalışıyor öyle konularda. Sonra ortaya yanlış bir şey çıktığı zaman yeniden baştan çalışıyor. Yani bu olabiliyor: Tasarım bilgilerinin eksik gelmesi ya da tasarım sürecinin bir yerlerinde bilgilerin değişmesi. Bu bir hatadan oluyor genellikle. en başta o müşteri ihtiyaçlarının net belirlenememesi buna neden oluyor. [31.17] Bazen kişi o an hata yaptığını bilmeyebiliyor. Orada o verinin eksik olduğunu bilmeyebilir. Mesela pazarlamadan gelen o bilginin eksik olduğunu pazarlama bilmeyebiliyor. Yolda giderken yeni bir bilginin farkına varmış olabiliyor. Yani başta bazı şeylerin analizini iyi yapmayınca daha sonradan birşeyler ortaya çıkabiliyor.

[22.7] İşte burada en başta nasıl istediğini, hangi segmente hitap edeceğini, daha bilinçli gelmesi, ben baya bi mesela bu brief formlarını – daha önce de vardı ama böyle şey, formlarımız falan yoktu – biz bunları kullanıp imzalı hale getirdik mesela. Bakın

bir şey istiyorsunuz, biz de ona göre ürün tasarlayalım, ona göre yapalım. Noldu onlara da (pazarlama departmanı), dedik ki gerekçeyi doldur. Şimdi bir ürün tasarlayalım ama ortada bir gerekçesi yok. Ne istediği belli değil. Onları da düşünmeye teşvik ettik, biz de sizin düşündüğünüze göre tasarlayalım getirdik. Böylelikle iletişim daha kuvvetli olduğu için projeler sonuna kadar daha sağlıklı çıkmaya başladı.

[23.6] Proje hem geç başladı, hem çok belirsizliklerle ve böyle kimsenin aslında içine sinmeyerek ama yine bir ‘çok ünlü tasarımcı’ ile çalışıldığı için, biz bu tasarımları yapacağız denildiği için, işte o arada bizim bilmediğimiz ego, prestij, iletişimden kaynaklı problemlerle proje başladı, tüm belirsizliklerine rağmen hiç yapmadığımız halde 5 prototip yaptık ve hala bir şeye varamadık mesela. Çünkü ürün sayısı fazlaydı, malzeme sayısı fazlaydı, çok böyle belirsiz yani hani hiç netleşmemiş, oturmamış bir projeydi. Gerçekten öyle olduğunda da projeler çok uzun sürüyor, iletişimlerden gerçekten çok zor oluyor, departmanlar arası tartışmalar çok fazla oluyor. Yani dediğim gibi oturmamış bir şey üzerinden, yani mesela bir soru soruyorsunuz, sonuçta karşıdaki de bunun cevabını bilmiyor, o da bir değerlendirme yapıyor, zaman kayıpları ve sonunda sıkışmalar, işte sonuçta belli bir zaman var, o zamana isterseniz 9 ay yatıp 3 ay çalışarak, isterseniz işte 2 ay çalışıp 9 ay yatarak varabilirsiniz. Dolayısıyla problemler yaşıyoruz. [23.7] Belirsiz olan tüm projeler mutlaka uzadı, herkesin tamam dediği, her şeyin her anlamda oturduğu, dediğim gibi sadece tasarım anlamında değil, o tasarımın o maliyete oturduğu, o pazarlayam kişinin pazarlayabileceği yere oturduğu noktada her zaman o ürün, hem sonucu da başarılı oluyor, süreci mutlaka iyi geçiyor.

[24.12] Takvime uymak sert. Bizde o takvimin aşılması çünkü aslında ürünün zamanında piyasaya girmemesi demek. Ürünün zamanında piyasaya girmemesi de satışların yapıldığı zaman diliminde çok büyük sıkıntı yaratıyor demek. Yani satışın yapılacağı zaman diliminde ürünü satışa sunmazsan, sonrasında o 3 aylık 6 aylık dilimi kaçırıyorsun ortalama, direk, otomatik olarak. O yüzden, pazarın alım yaptığı belirli aylar var, o aylarda o ürünün pazara mutlaka sunulması lazım. Kaçırduğumuzda seneye kalmış oluyor. O bizde baya sert.

[5.3] O koleksiyonda gerçekten tasarım yöneticisine tasarımı için, bir alan kaldı; ürün yönetimine bunu portföyünde konumlaması için ve doğru değerlendirmesi için bir alan kaldı; satışa gerçekten bununla nereyi konumlamak istediği, pazardaki bayiler arasında veya projelerde oynayabileceği alanlar kaldı, onları değerlendirebileceği alanlar kaldı; Ür-Ge'ye, daha doğrusu Ar-ge'ye yenilik yapması için bir alan kaldı, yani yeni bir şey göstermesi, yeni bir şeyi sunması adına bir alan kaldı.

[22.3] Bir modül projesiyse diyoruz ki ben bunu on günde yaparım. Orta zorlukta bir projeyse otuz gün, işte çok mesela modülü varsa, plastik parçaları çok vardır, ben bunu atmış gün gibi bir sürede bitiririm gibi bir süreç belirliyor ve bunu takvimine yerleştiriyor. Ve genel bir takvime yerleşiyor, bu proje ne zaman, ne kadar sürer, biz tasarım olarak süreci belirledikten sonra bizim ür-ge bölümüne iletiyoruz, o da işte prototip süreçlerini kendi bölümlerinin girişini yapıyor.

[4.8] Genelde terminleri yakalamakta zorlanıyoruz zaten. Bu, fabrikadan çıkan ürün belirtilen zamanda çıkmayabiliyor, çünkü ekstra çok fazla şey oluşabiliyor, ya da siz dışarıya üçüncü bir partiye tasarım briefi veriyorsunuz, verdiğiniz termin 5'i deniyor ama geliyor, revizyon veriyorsunuz, gidiyor tekrar geliyor 13'ünde geliyor. Bu da tamamen benim 5'inde basacağım ya da dağıtıma çıkaracağım işi otomatik olarak sarkıtıyor, yani genel olarak ve Wabi özelinde de terminde bir sıkıntı yaşıyoruz. Zamanlamayla ilgili sorunumuz var yani bence.

[31.4] Büyük projelerde süreç çok uzun olabiliyor. Mesela 5 sene 6 senelik bir süreci kapsayabiliyor. (...) Sürecin sonunda ne teslim edeceğimiz belli olduğu için, ara bölümlerine biz şeyler koyuyoruz bazen, aralarda checkpointler koyuyoruz. Yani ne durumdayız? Bütün herkesin aynı çizgiye gelebileceği toplantılar yapıp o teslim edeceğimiz şeyi, o dataysa ne durumdayız ve önümüzdeki iki ay boyunca bunu şu noktaya getirebilecek miyiz? Hangi bilgi eksiklikleri var? Hani bu haftalık toplantılarla yapılıyor bazen. Bazense hani 3 aylık bir süreçse 15 günde bir, bir ayda bir yapılan toplantılar olabiliyor. Böylece herkesin aynı çizgiye gelmesi sağlanarak daha sağlıklı bir süreç yönetimi sağlanabiliyor.

[21.21] Hani ürün yönetimi ürünün sahibi demiştim ya, evet onlar sahibi ama diyelim ki işte şu tarihte gelmesi gerekiyordu proje, neden gelmedi, neden gelmedi, neden gelmedi diye baskılıyoruz onları? Çünkü hani evet sahip onlar ama sonuçta süre kısıtına maruz kalacak olan yine onlar ve biziz aslında. Dolayısıyla biz de tabi ki bir takım baskılarda bulunuyoruz. İşte bu baskılar esnasında insanların birbirleri arasında gerilimler yaşanabiliyor yani hani nasıl diyeyim yani bunlar böyle tabi ki yüksek dozajlı şeyler olmuyor. Eğer gerçekten bireysel olarak bir problemin yoksa kendinle ilgili veya karşındakinin öyle bir problemi yoksa çok yüksek dozda olmuyor.

[24.11] Eğer bir projeyle ilgili çok bitsin şeklinde bir baskı varsa, hani bitsin nasıl olursa bitsin şeklinde bir baskı varsa, biz o işi tekrardan, yeniden yapabiliyoruz hani baştan savma bir şey çıkabiliyor mesela. Hani bu değil, doğruyu bulma yönünde tavrı olduğu zaman yöneticinin, o zaman daha iyi, daha düzgün, hani neredeyse aynı süreçte olan işler çıkıyor ortaya. Bitsin de nasıl biterse bitsin biz time'larımıza uyalım şeklinde değil de daha çok aslında doğruyu bulalım, hani bir kerede doğruyu yapalım şeklinde ilerlediği zaman, o zaman daha doğru ürün çıkıyor.

[31.15] Herkes birbirine dayalı iş yaptığı için, mesela ben şöyle anlatayım size: 3 boyutlu modelleme yaptığını düşünün, 3 boyutlu modelleme yapabilmesi için input gelmesi gerekiyor. Yani ne yapacağınızın belli olması gerekiyor ki - ya da kısmen belli olması gerekiyor ki - siz o işi geliştirebilirsiniz.

[23.10] Gerçekten hani iş odaklı biri olabilirsiniz ama sonuçta hani sizin duygularınız var. Gerçekten sevdiğiniz bir proje olursa...Ama bu sevme işi de biraz dediğim gibi şeyle ilgili oluyor: bu her şeyin işte hani belirli olmasıyla ilişkili oluyor. Yani tek başına hani 'a bu çok güzel bir konseptmiş' falan gibiyle gitmiyor yani. Çok böyle hoşunuza giden, hani şeklen de hoşunuza gidebilir ama, belirsizlikleri varsa, size bilgi akışı olmuyorsa, artık mutsuz olmaya ve yapmak istememeye başlıyorsun.

[24.21] Proje yöneticisi eğer bilgiyi kendine saklamayıp direk aktarabiliyorsa, o içteki koordinasyonu düzgün sağlayabiliyorsa, proje daha sağlıklı ilerleyebiliyor... Hani demek istediğim örneğin mekanik ekibin buna ihtiyacı var ama gövde ekibinin ondan

haberi yoksa iş biraz daha uzayabiliyor mesela. Hani o ekipler arası koordinasyonu ne kadar düzgün sağlıyorsa, proje o kadar hızlı ilerliyor.

[31.2] Tasarımcının aklında olan fikirleri en başta kendine çok iyi kanıtlaması, yani kendinde onu iyi çözmesi önemli. Çünkü onu iyi çözmezse, bir sonraki aşamaya bırakırsa - mesela 3 boyutlu modelleyen birine bırakırsa onu - 3 boyutlu modelleyen arkadaş da onun üzerine bir şeyler oluşturuyor ve yani orayı da bir şekilde yönetmeye çalışıyor designer, aklında olan fikri bir şekilde orada da şekillendirmeye çalışıyor ama hiçbir zaman kendi ilk basamaktaki kadar etkili yapamıyor. orada bir başkasının etkisi daha fazla oluyor ve bu nedenle oradaki iş akışı biraz daha kötü oluyor. İlk basamakta onu halledebilse, genellikle orada iyi çözüldüğü zaman tasarımla ilgili problemler, ondan sonraki basamaklar çok daha hızlı bir şekilde çözüm elde ediliyor.

[24.2] Ya bilgi saklamamak lazım, hani çünkü ekipler birbirinden çok eğer ayrı çalışıyorlarsa bilgi kopuklukları olabiliyor. Mesela bana verilen data eski data olup – ilk başlarda karşılaştığımız sıkıntılardan biriydi bu, şimdi zamanla çözüyoruz onu – hani bana verilen data eski dataydı, eski data üzerinden ben çalışmayı yaparken onlar datayı değiştirmişler ve benim yaptığım model gidip o gövdeye uymadı. Sebep tamamen şeyden kaynaklanıyordu, bana ulaşan verinin yanlış veri olmasıyla alakalı. Hani şey lazım, ekipler koordinasyonlu çalıştıkları için biz genelde bir sistem üzerinden indiriyoruz parçaları ama hani sisteme atılmış olması gerekiyor son verinin. Hani son verinin ulaşmasıyla ilgili bazı sıkıntılar çıkıyordu. Şimdi onları yendik. Hani şöyle yendik, ben sistemden çekmiyorum. Direk çalışan arkadaş, ilgili arkadaştan istiyorum, o bana veriyi ulaştırıyor.

[24.16] Oradan hava atılması gerektiğini düşünüyor mühendis, kendince orayı açıyor mesela hani orada ızgara yapıyor mesela, ama bunda sana bilgilendirme yapmıyor, sen sonrasında araçta görüyorsun. Ama bu süreci artık şu şekilde yönetiyoruz: burada açması gereken bir menfez olduğunu bana söylüyor, ben bu görselleştirmeleri çalışıyorum, ondan sonrasında görselleştirmeler üzerinden maksimum hava atımı nasıl olur ya da hava girişi nasıl olur gibi maksimumun, minimumun üzerinden gidip

ona göre çalışmayı yapıyoruz.

[22.1] Bizde mesela toplantılar oluyor sabah 15dk, bütün departmanlar – ilk başta Genel Müdür bazında başlıyor direktörler ve GME'lerin yaptığı toplantılar – burada iş akışlarından, arkadan ekiplere dağılıyor. Ben kendi ekibimle yapıyorum, tasarımla ayrı yapıyorum. Bu toplantılar da her gün 15dk yapılan toplantılarda işte problemler, birbirimize olan sorularımız, bunlar konuşuluyor ve mesela bu toplantılara dışarıdan birimler de katılıyor. Mesela Ür-Ge yöneticisi her gün bu toplantılara katılıp problemlerimiz hakkında konuşabiliyoruz. Bir de tasarımcılar birebir de kendileri toplantılarını yapıyorlar, işte mail atıyorlar, sorunlarımız, sıkıntılarımız var mı, hani bunlarla ilgili devamlı bir sirkülasyon var diyebilirim.

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EDUCATION

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MS	ERU Urban Design	2011
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WORK EXPERIENCE

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2012-2016	Melikşah University	Lecturer
2011-2013	SuKristali Design Studio	Owner / Product Designer
2010-2012	Melikşah University	Guest Lecturer
2008-2011	Freelance	Product Designer
2007-2008	Kayseri Design Studio	Product Designer

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