# THE ROLE OF ORGANIZATIONAL CULTURE ON EFFECTIVENESS

E + M

#### **Bulent Aydin, Adnan Ceylan**

#### Introduction

People join various organizations in most part of their lives. The organizations are strong social tools to arrange the relationships between the individuals. Organizations are goal directed, boundary maintaining, and socially constructed systems of human activity, which focuses attention on the social processes involved in the genesis and persistence of organizations [2]. When an individual wants to achieve his goals, which require more power than he has, he must cooperate with others. These statements make us to conclude that organizations satisfy the individuals' needs with collaborative working processes. Sometimes, the complexity of these processes and environmental changes force organizations to search more efficient operational exploration to improve their effectiveness. This means, increasing the efficiency will play important role in accelerating the development of the organizations, hence the welfare of the members.

In order to decide whether an organization is successful or not, some indicators of effectiveness should be analyzed. Customer satisfaction plays an important role in providing productivity for the organizations [14]. In addition, employee satisfaction is also important for successful businesses. Effective organizations should have a culture that encourages the employee satisfaction [8]. These employees are closer to the organizational commitment [33]. That is why, it is important to consider the satisfaction of both customers and employees for the effectiveness of the organizations. Customer orientation may bring the customer satisfaction and this may improve their financial and growth performance by the help of their satisfied employees. Due to these statements; our study will consider the customer orientation, employee satisfaction, organizational commitment and financial & growth performance as the indicators of the effectiveness.

It is sure that there may be many factors increasing the level of effectiveness in the businesses. As a different aspect, we will analyze the organizational effectiveness from the standpoint of organizational culture. Organizational culture is getting great importance for the businesses and, is being analyzed by many authors. In our study we will analyze the organizational culture in terms of its various dimensions. It is known that culture is a wide concept and may have many elements which differ according to the business areas. Therefore, we should analyze it from a set of dimensions which are; involvement, collaboration, transmission of information, learning, care about clients, strategic direction, reward and incentive system, system of control, communication, coordination and integration [17].

To perform our study, we have applied a research analysis on metalworking manufacturing. The study is an original study as being applied on the metal industry. This sector has been selected for several reasons. The metal sector has great significance in the global economy. The experts in this sector create their strategy maps by following the global market conditions. This makes our study gain an international importance. Besides the global view, we selected this sector for some other reasons. Since the metalworking manufacturing is heavy industry, the working conditions in this sector is rather hard. The results of this study will help to cope with these hard working conditions. From social work perspective, there is significant number of employees in the metal industry of the world. In this manner, the subject will concern a great number of people. In addition, investing on this sector requires great amount of monetary power, which may discourage the investors. Therefore, the investors will gain a different point of view in the decision process of investing on this sector. Lastly, there are not considerable researches related with the development of this sector (depending on the factors stated in our model). Hence, the organizations will gain an extensive vision to grow in the sector and this will help to raise their effectiveness. Furthermore, our study may contribute to the globally acting sectors other than metal that are challenging similar problems.

### 1 Importance of Effectiveness for Organizational Development

In the organizations, the members are differentiated in terms of roles. A system of structural interpersonal relations is managed in organizations, where the inputs are processed and the outputs are used as products by the efforts of the members. The organizations are always in an examination in the market and the key points of this examination are the products of the organizations. Additionally, the relationships with the customers and shareholders also play important role in this examination. In the context of partnership between two or more organizations, through exchange of information partners are kept informed of each other's role and development with respect to the effectiveness of the alliance [27]. Finding the gaps and building the bridges between -the customers and the organization- or between -the shareholders and the organization-(which requires a well communication within the organization and between the organizations) will contribute to organizational development. Effective communication is the lifeblood of a successful organization and it reinforces the organization's vision, connects employees to the business, fosters process improvement, facilitates change, and drives business results by changing employee behavior [44]. The communication of new knowledge and ideas from external entities can fertilize the strategic planning discussions and may lead to better strategic alternatives [3]. Besides that, the innovative firms must effectively utilize external information [40]. This means that the external analyses are the main part of big picture analysis for organizational development in effective organizations. Since the business environment is changing day by day, following the sociological, technological, economic and political changes in the business landscape will affect the organization's success. In different environmental conditions, organizations should compose different structures and the tasks must be defined flexibly. This involves giving more importance to the basis of organization members' expertise rather than their hierarchical levels. In addition to external analyses, the adaptation to external changes comes into prominence for the organizations. According to Warren Bennis [7] organizational development is a response to change, a complex educational strategy intended to change the beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself.

Cummings and Worley [12] define organizational development as a process by which behavioral knowledge and practices are used to help organizations achieve greater effectiveness, including improved quality of life, increased productivity, and improved product and service quality. Moreover, organizational development is oriented to improving the total system, the organization and its part in the context of total environment that impact upon them [32]. These definitions state that increasing the effectiveness of the organizations assist in the development of the organizations and we may think the 'effectiveness' as a part of developing process.

### 1.1 Measuring the Organizational Effectiveness

Effectiveness of the organizations is measured by the congruence between the goals of the organization and the observed outcome. Measurement is important in deciding the degree of this congruence between the goals and the outcomes. The effectiveness is measured as how well it works and achieves to its intended results. Thus, this will help the organization to assess itself how nearer it has approached for the perfection. Peter Drucker has defined the effective organization as 'doing the right thing' [16]. In another definition of organizational effectiveness, Mintzberg (1991) has suggested that organizational effectiveness will occur when the interplay of seven basic forces; direction, efficiency, proficiency, innovation, concentration, cooperation/culture and competition/politics is managed effectively [16]. The participants who are in relationship with the organization such as employees, customers or shareholders play the main role for the organizational effectiveness. Therefore, it will not be wrong to assume the organizational effectiveness

as related with the 'supplying the customer and employee satisfaction', 'increase of the productivity', and 'profit for the organization'. In consideration of these descriptions, we will try to measure the organizational effectiveness in terms of four indicators; customer orientation, employee satisfaction, organizational commitment and financial & growth performance.

### 1.1.1 First Indicator: Customer Orientation

Marketing is getting great importance for the firms day by day, which help them to increase their profits. The market oriented firms perform serious analyses for the marketing concept. Kohli and Jaworski (1990) point out three groups of activities to define the market orientation; generation of market intelligence relating to present and future customers' needs, dissemination of intelligence across departments within the organization and the organizational responsiveness [9]. This basic definition can be explained as; scanning of the environment to gather information about customers and competitors, dissemination of this information to all of the members of the organization for maximum utilization and converting this information as new (value-added) actions to offer to the marketplace. The other definition for market orientation which has been stated by Martin and Grbac (2003) is that; it is the implementation of marketing activities designed to satisfy customer needs better than competitors [15]. These definitions state that market orientation is crucial for the organizations and the basic part of market orientation is to focus on the customers. Hence; the organizations, which analyze their customers' needs better, will be more market oriented. Kohli and Jaworski [25] define the customer orientation as representing the degree to which customer information is both collected and used by the business unit. For Deshpande et al. [13], customer orientation is the set of beliefs that puts the customer into the center, while not excluding those of all other stakeholders such as owners, managers, employees, in order to develop a long-term profitable enterprise. Therefore, the organizations use the customer information to forecast the future needs of them. Thinking of the customers' priorities in the organizations is the main part of customer orientation. The firm

should cluster its customers and make a classification of them depending on various properties. Due to the subject of this paper, being more -customer oriented- will affect the development of an organization and we will use the customer orientation as a factor of organizational effectiveness.

### 1.1.2 Second Indicator: Employee Satisfaction

Utilizing from the employees is important for the effectiveness of the firms. This contributes to have competitive advantage; and mostly, human resource management (HRM) deals with this subject in the organizations. There is the 'employee concept' in the center of HRM. Lawler (1986) argued that a firm's HR strategy should be centered on developing skills and ensuring motivation and commitment [43]. In this statement, 'ensuring the motivation' is concerned with the employee satisfaction. That is why; the satisfaction of the employees takes an added importance. Employees are more loyal and productive when they are satisfied [21], and these satisfied employees affect the customer satisfaction as well as organizational productivity [37]. Employee satisfaction is defined as the combination of affective reactions to the differential perceptions of what he/she wants to receive compared with what he/she actually receives [11]. Therefore, the organizations should try to supply the employee expectations in order to approach the employee satisfaction. In addition, emotional state of the employees may also affect their satisfaction. This forces the managers to create and sustain the desired working environments in the organizations. One the other hand, as stated by Organ and Ryan (1995), the employee satisfaction is one of the basics of organizational citizenship behavior [35]. That is, the well-satisfied employees will work more willingly and; this contributes to the effectiveness of their organizations. To investigate what the employees are satisfied by and measuring the employee satisfaction in the workplace is critical to the success and increases the profitability of the organization for having competitive advantage [23]. Hence, these statements point out that employee satisfaction may be selected as another indicator of organizational effectiveness.

### 1.1.3 Third Indicator: Organizational Commitment

It is widely accepted that organizational commitment is the psychological strength of the linkage of a member to his organization in the literature. According to Meyer and Allen [29] an employee can simultaneously be committed to the organization in an affective, normative, and continuance sense. at varying levels of intensity. They describe the affective commitment as it refers to the employee's emotional attachment to the organization; continuance commitment refers to an awareness of the costs associated with leaving the organization and normative commitment reflects a feeling of obligation to continue employment. Rather than this basic definition, organizational commitment affects the willingness level of an employee about performing the organizational tasks and hinders mental escape from the work environment. The employees who feel more sense of organizational commitment exert extra effort for the organizational tasks. Furthermore, organizational structures need rules and the individuals should obey them. Whenever these rules bore the members, the high strength of organizational commitment may be a facilitative factor. Besides all, we understand that organizational commitment will be a factor of affecting the way of performing the organizational tasks. Therefore, the organizational commitment will be measured as the other indicator for effectiveness in our research model.

### 1.1.4 Fourth Indicator: Financial & Growth Performance

The financial performance is the measure of a firm's financial health and the growth performance is related with the increase in the volume of sales, number of employees and new products compared to previous periods. The monetary terms and the financial ratios are used in order to remark the financial performance of a firm. In our study, the survey items of -financial & growth performance- were responded only by the 'managerial level employees'. The financial & growth performance is a concrete indicator, which informs about the strength of a firm. Return on equity, return on assets, net profit margin from main activities, revenue from new products, overall business performance, average annual growth in sales, amount of new product, relative growth in market share, average annual growth in the number of employee, growth

in the number of new customers, overall competitive position and general profitability are the items, (which we asked the managerial level respondents) to measure the related indicator.

#### 2 Organizational Culture

### 2.1 Definition of Organizational Culture

The people learn most of the behaviors and beliefs from the people they grow up with. Although each individual has unique talents and personal preferences, the behaviors and beliefs of the people in the same organizations show common properties. This helps the organizations to create their own cultural properties. Since the members in the organizations work together in performing a job, the created culture will enable the organization members to understand each other and, work effectively. Deshpande and Webster (1989) make a definition for culture that, it is the pattern of shared values and beliefs that help members of an organization understand organizational functioning and thus teach them the behavioral norms in the organization [22]. Culture is the shared knowledge and schemes created by a set of people for perceiving, interpreting, expressing and responding to the social realities around them [26], and is an active living phenomenon through which people jointly creates and recreates the worlds in which they live [31]. The beliefs and ideas of the organizations have created the culture, which cannot be seen but its physical manifestations are felt in the work place. Actually, the working environment is surrounded by the culture, which shapes the job relationships and processes in the organizations. For Schein [38], the organizational culture helps the organizations to solve its problems of external adaptation and internal integration by creating a shared pattern. As the new members come into the organization, they perceive and think these problems in this shared pattern. According to these definitions; a group of people come together to perform a job, they need a set of rules to act in common manner and they need to know how to act in various circumstances. -Knowing how the other members of the organization act in the same circumstances- gathers the organization members under the same umbrella. Organizational culture is also taken into consideration in the decision making process of long-term

plans for strategic planning. O'Cass and Ngo [34] state that market-oriented behaviors (which generally take place in the organizations' strategy maps) are driven by the organizational culture that manifests itself in specific behaviors. That is why the strategic planners place much emphasis on the strong role of culture. This helps the organizations to have competitive advantages and nourishes the organizational health.

### 2.2 Related Dimensions of the Organizational Culture

It is widely accepted in the literature that the organizational culture is a complex concept. It may be analyzed from various perspectives. After a detailed investigation of the literature, the best fitting culture dimensions (in accordance with our research area) were selected from the study of Ginevičius and Vaitkūnaitė [17]. The multidimensional nature of organizational culture will be investigated in terms of involvement, collaboration, transmission of information, learning, care about clients, strategic direction, reward and incentive system, system of

control, communication, coordination and integration [17]. For Ginevičius and Vaitkūnaitė [17];

- The first dimension -involvement- is providing favorable conditions for all the members of the organization for decision making and giving various ideas or suggestions.
- Collaboration is the encouragement of the teamwork rather than individual work.
- Transmission of information is defined as the reaching of new or other important information to the employees in due time.
- Learning is the process of the activities to increase the existing knowledge.
- Care about clients is related with the satisfaction of the customers.
- Strategic direction deals with achieving the preidentified goals and plans of the organization.
- Reward and incentive system provides motivation for the employees.
- System of control assists the managers in supervising the employees.
- Communication is the lifeblood for an organization that builds bridges among the employees within the organization.

Communication Coordination and Integration Integration Collaboration nvolvement Care about Clients Incentive System Strategic Direction Learning Organizational Culture Customer Orientation Employee Organizational Organizational Satisfaction Commitment Effectiveness Financial & Growth Performance

Fig. 1: The Model

Source: own.

 Coordination and integration is different from communication that it ensures to work effectively with the persons from other departments or groups when carrying out common activities.

As a matter of fact, we may increase the number of the organizational culture dimensions and each of the organizational culture dimensions has different roles on the organization's progress. The selected dimensions in this paper are believed to be the basic and important ones for metalworking industry organizations.

#### 3 The Research Model

Related to our subject, we have constructed a relationship between the concepts, and created a model. According to the model, organizational culture dimensions affect the organizational effectiveness. The model for this research (depending on these factors) may be seen on figure 1.

#### 4 Methodology

The research plan has been stated as; researching for the survey questions on the literature, constructing the best fitting survey from the alternatives, reaching the participants and informing them for the survey, gathering the data, and measuring & analyzing these data.

#### 4.1 Scales

To perform our research, we have searched for the related scales in the literature. We did not construct our own scale. The scales have been obtained after a detailed investigation of the literature. Two different scales were used to gather data. There are six descriptive items for the first type of questions and 68 items for the second type of questions. The second type of questions is to calculate the value of organizational culture and organizational effectiveness. We asked the respondents to fill 39 items for organizational culture and 29 items for organizational effectiveness. Organizational effectiveness is composed of employee satisfaction (8 items), customer orientation (9 items), organizational commitment (4 items) and financial & growth performance (8 items). In the second type of guestions, the respondents have filled the statements in -Likert response categories- ranging from 1 to 5, which (1) is strongly disagree and (5) is strongly agree. The scales that we applied and their origins may be seen on below tables.

#### Tab. 1: Organizational culture scale

#### Involvement

- All employees have favorable conditions for decision making and for giving various ideas, suggestions, notes and so on
- There are created good conditions for the interesting work, therefore employees get used to their work willingly
- 3. Rituals and traditions of enterprise unite employees to work further effectively

#### Collaboration

- 4. Managers consult subordinates (they collaborate)
- Teamwork is used more often than individual work, especially when solving important questions or projects
- When problems, difficulties or questions arise, employees solve them more individually than by consulting other ones

#### Transmission of information

- 7. New or other important information reaches employees in due time
- 8. Employee is often lacking information, which is necessary to make decision or to work
- 9. Employees (also managers) often misunderstand each other (improper transmission of information)
- 10. Managers do not provide feedback to the employees

#### Learning

- 11. It is permanently invested into knowledge and skills of employees (different courses are offered and so on)
- 12. Managers improve themselves permanently
- 13. Employees teach each other, share skills and knowledge
- 14. Various investigation/analysis (e.g. of product characteristics, consumers and personnel needs) are made permanently

#### Care about clients

- 15. It is enough invested into improvement of product/service quality
- 16. Employees look after clients and satisfaction of their needs permanently
- 17. Dissatisfaction of clients is always removed
- 18. It is offered to the client, what enterprise thinks is better, but not this, what client desires
- Enterprise inquires customers opinion about products/ services and improvement of them and takes that into account

#### Strategic direction

- 20. Enterprise has a long-term strategy, plans and goals
- 21. Goals and plans are achieved purposefully
- 22. Your enterprise is as leader showing direction, other enterprises "follow" it
- 23. Work is planned so, that everybody knows what and how to do his/her job
- 24. Vision of enterprise becomes reality little by little

#### Reward and incentive system

- Reward system is correct (employee is getting salary/ wage according to the results and efforts)
- 26. It is always rewarded (in monetary or other form) for the good works, ideas, innovations and so on
- 27. Existing punishment system is correct
- 28. Employees are more often awarded than punished
- 29. Managers care about welfare of employees (e.g. they are provided with free services, things and so on)

#### System of control

- 30. Existing rules and norms are more directive (i.e. show direction) than restrictive
- 31. Employees have too much freedom; they think that manager must show direction
- 32. Managers control subordinates too much

#### Communication

- 33. Managers more often ask than command
- 34. Managers' teaching and deeds are always at variance
- 35. Manager always strives to help and advice employee
- 36. Communication between employees is friendly (more informal than formal)

#### Coordination and integration

- 37. It is very hard to work with person from other department/ group
- 38. Departments (groups) have difficulties when carrying out common activity, sharing information and so on
- 39. Different departments (groups) have many common things (goals, tasks, celebrations and so on)

Source: Ginevičius & Vaitkūnaitė (2006) [17]

#### Tab. 2: Employee satisfaction scale

- I expect to remain working here for at least the next two years, assuming I continue to meet performance expectations.
- 2. I would recommend our organization to friends as a good place to work.
- 3. Our company values are consistent with my personal values.
- 4. There are no processes or organizational barriers to my doing a good job.
- 5. The work that I do makes a difference to this organization.
- Our leadership team has the capabilities and commitment to address the challenges our organization faces.
- 7. I am trusted to make meaningful decisions in my day to day activities.
- 8. I am paid fairly, given my responsibilities and performance.

Source: Michelman (2003) [30]

#### Tab. 3: Organizational commitment scale

- 9. I would be willing to change companies if the new job offered a 25% pay increase.
- 10. I would be willing to change companies if the new job offered more creative freedom.
- 11. I would be willing to change companies if the new job offered more status.
- 12. I would be willing to change companies if the new job was with people who were more friendly.

Source: Hunt et al. (1985) [20]

#### Tab. 4: Customer orientation scale

- 13. We have routine or regular measures of customer service.
- 14. Our product and service development is based on good market and customer information.
- 15. We know our competitors well.
- 16. We have a good sense of how our customers value our products and services.
- 17. We are more customer focused than our competitors.
- 18. We complete primarily based on product or service differentiation.
- 19. The customer's interest should always come first, ahead of the owners.
- 20. Our products/services are the best in the business.
- 21. I believe this business exists primarily to serve customers.

Source: Deshpande et al. (1993) [13]

#### Tab. 5: Financial & growth performance scale

Compare the below items according to your rivals (considering the last year);

- 22. Return on equity
- 23. Return on assets / pre-tax
- 24. Net profit margin from main activities
- 25. Revenue from new products
- 26. Overall business performance
- 27. Relative growth in market share
- 28. Overall competitive position
- 29. General profitability

Source: Antoncic & Hisrich (2001) [4], Venkatraman & Ramanujan (1986) [41], Lynch et al. (2000) [28], Zahra et al. (2002), [45], Chang et al. (2003) [10], Baker & Sinkula (1999) [6], Vorhies & Morgan (2005) [42]

#### 4.2 Sample and Data Collection

We drew our sample from the employees of metalworking firms in Turkey. The selected firms have had manufacturing process. They are all profit organizations. After specifying the sample, we have formed the survey instrument and searched for the potential participants to send the questionnaire. More than 1000 contacts were made or attempted. Some of them were ineligible, some of them refused to participate in the survey, some of them did not respond although they accepted to participate. A total of more than 600 surveys returned, however, some of them had excessive missing values and were excluded from the analysis. Finally, the valid responses have reached to 578. We have sent the questionnaire to the participants via electronic mail. In some occasions, we telephoned to the firms to inform about the survey and requested to join it.

#### 4.3 Analysis and Results

After gathering the data, we have entered them in SPSS (Statistical Package for the Social Sciences) version 11.5. These entered data have been analyzed by some of SPSS tools, which are descriptive statistics, reliability analysis, factor analysis, correlation analysis and regression analysis.

### 4.3.1 Results of the Descriptive Statistics

As the first analysis, we have described the basic features of the data with the descriptive statistics to provide simple summaries about respondents.

- Out of 578 respondents, the average age of individuals who joined the survey is 32.75 (Mean=32.75, Standard Deviation =7.94).
- The average of total working year is 11.01 (Mean=11.01, Standard Deviation =7.91).
- The average of working year on their current firm is 7.69 (Mean=7.69, Standard Deviation =6.21).
- 8% of 578 employees are graduated from primary school (44/578), 67% of them are graduated from high school (387/578), 25% of them are graduated from college (147/578).
- The respondents who are between the age of 19 and 25 are 20% (116/578), between 26

- and 35 are 47% (272/578), between 36 and 45 are 24% (141/578), older than 46 are 8% (49/578).
- The managers consist of 7% of total (40/578).
- The employees working on the production department are 56% (322/578) and the other departments are 44% (256/578).
- The rate of the respondents whose job-life is between one and 10 years is 54% (314/578), 11 and 20 years is 32% (183/578), more than 20 years is 14% (81/578).
- The rate of the respondents who have been working on their current firm for 1 to 10 years is 71% (410/578), for 11 to 20 years is 24% (138/578), for more than 20 years is 5% (30/ 578).

## 4.3.2 Results of the Reliability Analysis

The second applied analysis at SPSS was the reliability analysis. The computation of Cronbach's alpha on the reliability of a test is a good alternative in SPSS [18]. The Cronbach's alpha value has come out as 0.78 for organizational culture, 0.99 for employee satisfaction, 0.90 for customer orientation, 0.99 for organizational commitment and 0.93 for financial & growth performance. Vavra (1999) states that a scale is reliable if its Cronbach's alpha value is equal or above the value of 0.70 [36]. Since each of the Cronbach's alpha values (which we calculated by SPSS) are above 0.70, we have proved that the scales we used for our research are all reliable.

### 4.3.3 Results of the Factor Analysis

The third analysis is the factor analysis in order to specify a set of observed variables in terms of a small number of factors. In the factor analysis, the factor loadings- show, what percent of each item has been loaded to the factors. Furthermore, the total explained variance (which we have calculated by the factor analysis tool on SPSS) shows the total measuring capacity of items for the related variables.

In factor analysis, it is a common rule that -the values above 0.50 in rotated component matrixare acceptable [1]. We will analyze the results due to this statement. Therefore, for the results

of the factor analysis of the organizational effectiveness; employee satisfaction, customer orientation, organizational commitment and financial & growth performance has gone to different factors. This shows that each of the organizational effectiveness variables indicates different meanings for the respondents (see table 6). The factor analysis also helped us to know our scale's measuring capacity of organizational effectiveness, which has come out as 0.90.

Subsequently, we have investigated the factor analysis results of the organizational culture. For the results of the factor analysis of the organizational culture; involvement and collaboration, communication, coordination and integration have gone to the first factor. Learning, reward and incentive system, and system of control have gone to the second factor. Care about clients and strategic direction have gone to the third factor and transmission of information has gone to the

Tab. 6: Rotated component matrix (factor analysis of organizational effectiveness)

		Component					
		1	2	3	4		
	Question01	0.34915	0.89708	0.03759	0.19979		
E O	Question02	0.36643	0.87721	0.05856	0.24525		
facti	Question03	0.36151	0.88159	0.03479	0.23428		
Satis	Question04	0.35066	0.87173	0.11292	0.22089		
99	Question05	0.34483	0.89958	0.04865	0.21678		
Employee Satisfaction	Question06	0.36743	0.88973	0.03595	0.20773		
Ē	Question07	0.31987	0.88745	0.01092	0.25034		
	Question08	0.35475	0.86274	0.05543	0.28901		
nal	Question09	0.35434	0.41781	-0.01739	0.81935		
zatio	Question10	0.33500	0.34464	-0.05155	0.87058		
Organizational Commitment	Question11	0.31885	0.41652	-0.02418	0.84062		
δŏ	Question12	0.31316	0.37150	-0.06733	0.86460		
	Question13	0.90417	0.33341	-0.04914	0.20245		
_	Question14	0.89195	0.38242	-0.02551	0.17401		
Sustomer Orientation	Question15	0.92402	0.28950	-0.06086	0.19430		
ient	Question16	0.87934	0.36490	-0.01034	0.23467		
o i	Question17	0.93182	0.29044	-0.02898	0.14125		
оше	Question18	0.90173	0.32818	-0.07897	0.20253		
Cust	Question19	0.93767	0.27284	-0.05062	0.16218		
	Question20	0.91680	0.30809	-0.07140	0.19995		
	Question21	0.92906	0.26627	-0.04182	0.19599		
	Question22	-0.12115	0.01328	0.89882	-0.06830		
in g	Question23	0.03527	0.08169	0.86734	-0.19833		
elop	Question24	0.05988	-0.09064	0.81886	-0.02621		
Financial & Developing Performance	Question25	0.08550	0.31221	0.64950	0.18370		
al &	Question26	-0.11519	-0.01099	0.89238	-0.01680		
anci Pe	Question27	0.00612	0.18668	0.78765	0.00631		
ᄩ	Question28	-0.10241	-0.12644	0.71143	0.06327		
	Question29	-0.09598	0.01631	0.90881	-0.04557		

(Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization, with 5 iterations.)

Source: SPSS 11.5 (Statistical Package for the Social Sciences)

Tab. 7: Rotated component matrix (factor analysis of organizational culture)

		Component					
		1	2	3	4		
4	Question01	0.84221	-0.27133	-0.29082	0.09171		
Involve- ment	Question02	0.82134	-0.31889	-0.31302	0.11388		
<u></u>	Question03	0.85301	-0.27100	-0.30229	0.13067		
ά	Question04	0.83249	-0.28858	-0.37615	0.14921		
Coopera- tion	Question05	0.83612	-0.29541	-0.38422	0.14258		
ပိ	Question06	0.83236	-0.28383	-0.38081	0.15005		
u C	Question07	0.19441	-0.08540	0.12398	0.95533		
Transmission of information	Question08	0.16242	-0.07846	0.11977	0.96101		
ansminfor	Question09	0.22943	-0.07890	0.10355	0.94921		
Tra	Question10	0.19145	-0.05449	0.09611	0.96419		
	Question11	-0.25236	0.90959	0.04828	-0.11846		
ning	Question12	-0.33373	0.86861	0.06196	-0.20074		
Learning	Question13	-0.26182	0.90711	0.08102	-0.12630		
	Question14	-0.32624	0.83053	0.05539	-0.21891		
nts	Question15	-0.32226	0.06700	0.91181	0.08860		
Clie	Question16	-0.29504	0.05998	0.90280	0.07650		
oout	Question17	-0.27568	0.06410	0.91661	0.08060		
Care About Clients	Question18	-0.26820	0.08960	0.92360	0.03120		
Cal	Question19	-0.28134	0.13516	0.89161	0.07289		
ion	Question20	-0.34811	0.05773	0.92557	0.04245		
Strategic Direction	Question21	-0.33832	0.02340	0.92796	0.02462		
ic D	Question22	-0.30857	0.03998	0.93828	0.06989		
ateg	Question23	-0.35018	0.04999	0.92464	0.06518		
Str	Question24	-0.27940	0.05918	0.94298	0.07278		
Ε	Question25	-0.17505	0.94511	0.18004	0.04081		
Reward and Incentive System	Question26	-0.15318	0.95944	0.11168	0.08555		
Reward and centive Syste	Question27	-0.15114	0.96558	0.03853	0.11439		
Rev	Question28	-0.15241	0.95170	0.16369	0.02362		
드	Question29	-0.09728	0.97120	0.04310	0.07760		
r lo	Question30	-0.28302	0.91846	0.01469	-0.11332		
System of Control	Question31	-0.27252	0.87081	-0.03307	-0.13744		
S -jo	Question32	-0.38798	0.84576	0.01789	-0.12827		
φ 	Question33	0.87033	-0.27572	-0.31144	0.10490		
Communica- tion	Question34	0.87724	-0.25175	-0.32778	0.11452		
omr	Question35	0.82120	-0.31618	-0.37064	0.15966		
O	Question36	0.83998	-0.26299	-0.34304	0.09846		
-br ion	Question37	0.84220	-0.21876	-0.31705	0.13730		
Coordina- tion and ntegration	Question38	0.86848	-0.25717	-0.34935	0.13017		
S tio	Question39	0.89017	-0.21168	-0.27847	0.15393		

(Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization, with 6 iterations.)

Source: SPSS 11.5 (Statistical Package for the Social Sciences)

Tab. 8: Correlation analysis matrix

		Involvement	Cooperation	Transmission of information	Learning	Care About Clients	Strategic Dire- ction	Reward and In- centive System	System of Control	Communication	Coordination and Integration
	Pearson Correlation	0,331**	0,363**	0,121**	0,280**	0,705**	0,710**	0,319**	0,238**	0,341**	0,319**
Org. Eff.	Sig. (2-tailed)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	N	578	578	578	578	578	578	578	578	578	578

\*\*Correlation is significant at the 0.01 level (2-tailed). Source: SPSS 11.5 (Statistical Package for the Social Sciences)

fourth factor (see table 7). The factor analysis also helps us to know the value of the cumulative explained variance of organizational culture items, which has come out as 0.936.

The next analysis that we have applied to our research is to find out the results of 'Kaiser-Meyer-Olkin (KMO) test' and 'Bartlett's Test of Sphericity'. These tests inform the researchers about the adequacy level of factor analysis [39]. In order to conclude whether the amount of data is sufficient to measure our research and ade-

quate for the factor analysis, we have performed these two tests. Consequently, the results of Bartlett's test of our research are significant (at the 0.000 level) for all of the variables and, the measures of KMO tests are; 0.97 for organizational culture and 0.78 for organizational effectiveness. KMO test result is adequate above the value of 0.50 and the result is to be considered better as this value approaches to 1 [5]. Therefore, results of these tests approve the adequacy of our scale.

Tab. 9: Regression analysis scores

Model Summary					
Model R		R Square	Adjusted R Square	Std. Error of the Estimate	
1	.779ª	.606	.600	.61399	

a Predictors: (Constant), involvement, collaboration, transmission of information, learning, care about clients, strategic direction, reward and incentive system, system of control, communication, coordination and integration.

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	329.390	10	32.939	87.374	.000 a
1	Residual	213.753	567	.377		
	Total	543.143	577			

a Predictors: (Constant), involvement, collaboration, transmission of information, learning, care about clients, strategic direction, reward and incentive system, system of control, communication, coordination and integration.

Source: SPSS 11.5 (Statistical Package for the Social Sciences)

b Dependent Variable: Organizational Effectiveness.

## **4.3.4 Results of the Correlation Analysis**

After proving that the scales are reliable and sufficient to measure our data, we may search for the correlation analysis. The correlation analysis gives the results about the variables whether they tend to vary together or not. For the results of the correlation analysis –as seen at table 8-, there are significant correlations (at the 0.000 level) between organizational effectiveness and each organizational culture dimensions (involvement, collaboration, transmission of information, learning, care about clients, strategic direction, reward and incentive system, system of control, communication, coordination and integration).

### 4.3.5 Results of the Regression Analysis

As the other statistical tool, we have applied the regression analysis to our research. Since the research questions have the capacity of measuring the variables, we will be able to investigate the significance of the model. The ANOVA table (see table 9) of regression analysis informs us that our model is significant (at the 0.000 level).

Additionally, the organizational culture dimensions can explain 60% of the total variance of organizational effectiveness. This is the R square value that can be seen on model summary part of regression analysis (table 9).

#### **Conclusion and Discussion**

Our study is based on organizations. The term social system refers to large aggregates of human relationships such as organizations, neighborhoods or society itself [19]. In organizations, people come together and try to connect the interdependent parts of the mechanism to improve the efficiency for organizational development. Organization concept is being used in a wide field and it is getting great importance day by day. This is why most of researchers study this concept. Most of the studies indicate that the results of a 'management research' may vary from one sector to another even if these sectors show close similarities.

An industry shakeout can be explained as the solidification of an industry, and it requires the smaller and weaker organizations either to be acquired or driven out of business [24]. In order not to be driven out of business, the organizations have to know the ways of effectiveness. Organizational effectiveness has a complex structure. which directly concerns the development of the organizations. In this paper, we have investigated the relationship between organizational effectiveness and organizational culture dimensions. For the results of our study, we concluded that organizational effectiveness has significant correlations with the cultural dimensions: involvement, collaboration, transmission of information. learning, care about clients, strategic direction, reward and incentive system, system of control, communication, coordination and integration. Additionally, organizational culture has an impact on metalworking industry to increase the effectiveness. The total explained variance of organizational effectiveness depending on organizational culture dimensions is just above a middle level (0.60), which entails the researchers to find out other factors, join the model and increase the concerned value.

The effective organizations should provide employee satisfaction and organizational commitment, as well as disseminate the 'customer' concept to all departments. This requires a well communication and coordination. -Disseminating the customer concept to the organization- contributes to being a systems-thinker as well as seeing the big-picture. This will surely carry the financial and growth performance. Therefore, effectiveness concerns each member of the organization and so is culture. This may be the reason why organizational effectiveness is completely related with organizational culture. In consequence, we may conclude that concentrating on creating a culture in the organizations will facilitate reaching the effectiveness.

The results of this study have original implications for businesses as well as academic researchers. We believe that the strategy planners will consider the findings of this research when constructing their strategy maps. Nevertheless, as a discussion area, we suggest the researchers to study on the other business areas other than metal and compare the results to reach a sensible conclusion. As another discussion area, more 'organizational culture dimensions and organizational effectiveness factors' may be redesigned for different businesses. This involves restructuring

the survey items and scales. Additionally, organizational culture dimensions may influence each of the organizational effectiveness factors in different levels. To reveal this, a complex model could be constructed for inferences that are more detailed.

#### References:

- [1] ALBAYRAK A. S. SPSS *Uygulamali Cok Degiskenli Istatistik Teknikleri*, Ankara, Asil Yayin Daqitim, 2005. ISBN 9759091143.
- [2] ALDRICH, H. Organizations Evolving. 1st ed. London: Sage Publications, 1999. ISBN 0803989199.
- [3] ANDERSEN, T. J. Information technology, strategic decision making approaches and organizational performance in different industrial settings. *Journal of Strategic Information Systems*, 2001, Vol. 10, Iss. 1, pp. 101-119. ISSN 0963-8687.
- [4] ANTONCIC, B. and HISRICH, R. D. Intrapreneurship: construct refinement and cross-cultural validation. *Journal of Business Venturing*, 2001, Vol. 16, pp. 495-527. ISSN 0883-9026.
- [5] AYDIN, B. Faktor analizi yardimiyla performans olcutlerinin boyutlarinin ortaya konulmasi. The 8th Econometrics and Statistics Congress of Turkey, May, 2007, University of Inonu Malatya Turkey.
- [6] BAKER, W. E. and SINUKLA, J. M. The synergistic effects of market orientation and learning orientation on organizational performance. *Journal of Academy of Marketing Science*, 1999, Vol. 27, Iss. 4, pp. 411-427. ISSN 1552-7824.
- [7] BENNIS, W. Organization Development: Its Nature, Origins And Prospects, NY: Addison-Wesley, 1969. ISBN B000WGE1PW.
- [8] BHATTI, K. and QURESHI, T. Impact of employee participation on job satisfaction, employee commitment and employee productivity. International Review of Business Research Papers, 2007, Vol. 3, Iss. 2, pp. 54 68. ISSN 1832-9543.
- [9] BOZIC, L. The effects of market orientation on product innovation. *Economic Trends and Economic Policy*, 2006, Vol. 107, pp. 46-65. ISSN 1330-187X.
- [10] CHANG, S., LIN, N., YANG, C. and SHEU, C. Quality dimensions, capabilities and business strategy: an empirical study in high-tech industry.

- Total Quality Management, 2003, Vol. 14, Iss. 4, pp. 407-421. ISSN 0954-4127.
- [11] CRANNY, C. J., SMITH, P. C. and STONE, E. F. Job Satisfaction: *How People Feel about Their Jobs and How It Affects Their Performance*. 1st ed. New York: Lexington, 1992. ISBN 066921289.
- [12] CUMMINGS, T., WORLEY, C. Organization development and change. Cincinnati, OH: South-Western Publishing, 2004. ISBN 0324421389. [13] DESHPANDE R., FARLEY J. U. and WEBSTER F. E. Corporate culture, customer orientation, in Japanese firms: A quadrad analysis. Journal of Marketing, 1993, Vol. 57, pp. 23-27.
- [14] DURMAZ, Y. Customer satisfaction in modern marketing and the universal consumer rights, *Journal Of Yasar University* [online], 2006, Vol. 1, Iss. 3, [cit. 2008-05-05]. Available from: <a href="http://joy.yasar.edu.tr/makale/ucuncusayi/YakupDURMAZ.pdf">http://joy.yasar.edu.tr/makale/ucuncusayi/YakupDURMAZ.pdf</a>.

ISSN 0022-2429.

- [15] ERDIL, S., KESKIN, H. and ERDIL, O. The relationships between market orientation, firm innovativeness and innovation performance. *The Journal of Global Business and Technology*, 2003, Vol. 1, pp.3-12. ISSN 1553 5495.
- [16] FREEMAN, R. Correctional Organization and Management: Public Policy Challenges, Behavior, and Structure. 1st ed. Boston, MA: Butterworth-Heinemann, 1999. ISBN 0750698977.
- [17] GINEVIČIUS, R. and VAITKŪNAITĖ, V. Analysis of organizational culture dimensions impacting performance. *Journal of Business Economics and Management*, 2006, Vol. 7, Iss. 4, pp. 201-211. ISSN 1611-1699.
- [18] HATCHER, L. A Step-By-Step Approach to Using the SAS(R) System for Factor Analysis and Structural Equation Modeling. 1st ed. Cary, NC: SAS Institute Publishing, 1994. ISBN 1555446434.
- [19] HOY, W. and FORSITH, P. Effective Supervision Theory into Practice. 1st ed. NY: McGraw-Hill Companies, 1986. ISBN 0075543702.
- [20] HUNT, S., CHONKO, L. and WOOD, V. Organizational commitment and marketing. *Journal of Marketing*, 1985, Vol. 49, Iss. 1, pp. 112 126. ISSN 0022-2429.
- [21] HUNTER, W. and TIETYEN, D. Business to business marketing: Creating a community of customers. 1st ed. Lincolnwood-Illinois: McGraw-Hill Professional, 1997. ISBN 0788194860.

- [22] KANDEMIR, D. and HULT, G. T. A conceptualization of an organizational learning culture in international joint ventures. *Industrial Marketing Management*, 2004, Vol. 34, Iss. 5, pp. 430-439. ISSN 0019-8501.
- [23] KELLEY, T. Employee satisfaction results in improved profitability [online], 2005. [cit. 2008-04-04]. Available from. <a href="http://www.indiangaming.com/istore/Nov05\_Kelley.pdf">http://www.indiangaming.com/istore/Nov05\_Kelley.pdf</a>.
- [24] KIM, B. and PARK, K. Dynamics of industry consolidation and sustainable competitive strategy: is birthright irrevocable? *Journal of Long Range Planning*, 2006, Vol. 39, Iss. 1,pp. 543-566. ISSN 0024-6301.
- [25] KOHLI, A. and JAWORSKI B. J. Market-orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 1990, Vol. 54, pp. 90-113. ISSN 0022-2429.
- [26] LEDERACH, J. P. Preparing for peace: Conflict transformation across cultures. (Syracuse Studies on Peace and Conflict Resolution). 1st ed. NY: Syracuse University Press, 1995. ISBN 0815627254.
- [27] LOO P. C. and RAMASESHAN B. Factors affecting a partner's perceived effectiveness of strategic business alliance: Some Singaporean evidence. *International Business Review*, 1998, Vol. 7, Iss. 1, pp. 443-458. ISSN 0969-5931.
- [28] LYNCH, D. F., KELLER, S. B. and OZMENT, J. The effects of logistics capabilities and strategy on firm performance. *Journal of Business Logistics*, 2000, Vol. 21, Iss. 2, pp. 47-67. ISSN 0735-3766.
- [29] MEYER, J. P. and ALLEN, N. J. A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1991, Vol. 1, pp. 61-89. ISSN 1053-4822.
- [30] MICHELMAN, P. Your new core strategy: Employee retention. *Harvard Business School Working Knowledge*, Nov. 26, 2003.
- [31] MORGAN, G. Images of Organization, Thousand Oaks, CA: Sage Publications, 1997. ISBN: B0025UYF2W.
- [32] MOSAN, J. digital change and organizational development: views from the public sector in Papua New Guinea. *South Pacific Journal of Psychology*, 2005, Vol. 16, Iss. 1, pp. 48-58. ISSN 1329-2617.
- [33] MOYES, G. D. and SHAO, L. P., NEWSO-ME, M. Comparative analysis of employee job

- satisfaction in the accounting profession. *Journal of Business & Economics Research*, 2008, Vol. 6, Iss. 2, pp. 65-81. ISSN 1542-4448.
- [34] O'CASS A. and NGO L.V. Balancing external adaptation and internal effectiveness: achieving better brand performance. *Journal of Business Research*, 2007, Vol. 60, pp. 11-20. ISSN 0148-2963.
- [35] OZDEVECIOGLU, M. Orgutsel vatandaslik davranisi ile universite ogrencilerinin bazi demografik ozellikleri ve akademik basarilari arasindaki iliskilerin belirlenmesine yonelik bir arastırma. Erciyes Universitesi Iktisadi ve Idari Bilimler Fakultesi Dergisi, 2000, Vol. 20, pp. 117-135. ISSN 1301-3688.
- [36] OZDOGAN, F. B. and TUZUN, I. A research on students' perceived trust to their universities. *Kastamonu Egitim Dergisi*, 2007, Vol. 15, Iss. 2, pp. 639-650. ISSN 1300-8811.
- [37] POTTERFIELD, T. The Business of Employee Empowerment: Democracy and Ideology in the Workplace, Westport. 1st ed. Conn, Greenwood Publishing Group, 1999. ISBN 1567202616.
- [38] SCHEIN, E. H. Organizational Culture and Leadership. 1st ed. San Francisco: Jossey-Bass Publishers, 1992. ISBN B001U35BLY.
- [39] SEMERCI, C. Ilkogretim turkce ve matematik ders kitaplarini genel degerlendirme olcegi. *Cumhuriyet Universitesi Sosyal Bilimler Dergisi*, 2004, Vol. 8, Iss. 1, pp. 49-54. ISSN 1303-0329.
- [40] TRUMBACH, C., PAYNE D. and KONG-THON, A. Technology mining for small firms: knowledge prospecting for competitive advantage. *Journal of Technological Forecasting & Social Change*, 2006, Vol. 73, pp. 937-949. ISSN 0040-1625.
- [41] VENKATRAMAN, N. and RAMANUJAN, V. Measurement of business performance in strategy research: a comparison of approaches. *Academy of Management Review*, 1986, Vol. 11, Iss. 4, pp. 801-814. ISSN 0363-7425.
- [42] VORHIES, D. W. and MORGAN, N. A. Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 2005, Vol. 69, pp. 80-94. ISSN 0022-2429.
- [43] WALLACE, C., EAGLESON, G. and WAL-DERSEE, R. The sacrificial HR strategy in call centers. *International Journal of Service Industry*

Management, 2000, Vol. 11, Iss. 2, pp. 174-185. ISSN 0956-4233.

[44] WYATT, W. Effective Communication: A Leading Indicator of Financial Performance, White Paper from Watson Wyatt Worldwide [online], 2006. [cit. 2008-05-05]. Available from: <a href="http://www.watsonwyatt.com/research/resrender.asp?id=w-868&page=1">http://www.watsonwyatt.com/research/resrender.asp?id=w-868&page=1</a>.

[45] ZAHRA, S. A., NEUBAUM, D. O. and EL-HA-GRASSY, G. M. Competitive analysis and new

venture performance: Understanding the impact of strategic uncertainty and venture origin. *Entre*preneurship Theory and Practice Fall, 2002, pp. 1 - 28. ISSN 1042-2587.

#### **Bulent Aydin**

Department of Business Administration Gebze Institute of Technology (GYTE) bulentaydin@kibarholding.com

#### Adnan Ceylan (Assoc. Prof.)

Department of Business Administration Gebze Institute of High Technology (GYTE)

Doručeno redakci: 28. 11. 2008 Recenzováno: 29. 1. 2009; 10. 3. 2009 Schváleno k publikování: 29. 6. 2009

#### THE ROLE OF ORGANIZATIONAL CULTURE ON EFFECTIVENESS

#### **Bulent Aydin, Adnan Ceylan**

In this study, the main subject is to contribute to the businesses as well as academic researchers about the effect of organizational culture in reaching the organizational effectiveness. Sustaining the organizational effectiveness is an important factor for organizational development and, the managerial level employees may utilize from the results of this study when constructing their strategy maps. To perform the study, we made a research analysis and applied a survey instrument on a number of 578 employees in metalworking industry. We constructed an original model to fulfill the gap between the organizational culture and organizational effectiveness. We measured the organizational culture in dimensions of 'involvement', 'collaboration', 'transmission of information', 'learning', 'care about clients', 'strategic direction', 'reward and incentive system', 'system of control', 'communication' and 'coordination and integration'. Additionally, we measured the organizational effectiveness in terms of 'customer orientation', 'employee satisfaction', 'organizational commitment' and 'financial & growth performance'. The methodology was carried out as researching for the survey questions on the literature, constructing the best fitting survey from the alternatives, reaching the participants and informing them for the survey, gathering the data, and measuring & analyzing these data. The gathered data were entered in SPSS (Statistical Package for the Social Sciences) version 11.5. By the results of the SPSS analyses, we determined that the constructed model is significant (at the 0.000 level) and all organizational culture dimensions have significant correlations with organizational effectiveness (at the 0.000 level). Furthermore, the total explained variance of organizational effectiveness depending on -organizational culture dimensions- has come out as the value of 0.60. Therefore, we may conclude that; the academic researchers as well as managerial level employees should investigate other factors to reach a high level of effectiveness.

Key Words: Organizational culture, Organizational effectiveness, Metalworking industry.

JEL Classification: M10.