



## A Study on the Satisfaction of the Employees in the Internal Customer Relationship Management

Yavuz Demirel\*

Department of Business Administration Faculty of Economics and Administrative Sciences University of Aksaray,  
68100 Aksaray, Turkey

**Abstract:** In this study, the factors that affect the satisfaction of the workers in the Internal Customer Relationship Management (IntCRM) in a X manufacturing-industry operation that has a leading role in the white-goods sector in Turkey are studied. In this context, the direction of the relationships among the dimensions of the Internal Customer Relationship Management (internal customer satisfaction, effective management, internal customer-focused culture and attitude, technological competence, cooperation and communication) is examined. The study also deals with the relationship between the socio-demographic characteristics of the workers and internal customer satisfaction dimension, as well as the relationship between socio-demographic characteristics of the workers and cooperation/communication dimension in detail. Additionally, the question whether internal customer satisfaction level varies in accordance with the management style is settled. Besides, various suggestions for the internal customer satisfaction have been made, putting forward the factors that are effective in the internal customer (workers) satisfaction.

**Key words:** Internal customer satisfaction, IntCRM, Cooperation and communication, Being internal customer-focused, Effective management, White goods industry in Turkey.

### İç Müşteri İlişkileri Yönetiminde Çalışanların Tatmini Üzerine Bir Araştırma

**Özet:** Bu çalışmada, Türkiye’de beyaz eşya sektöründe öncü bir role sahip X imalat-sanayi işletmesinde İç Müşteri İlişkileri Yönetiminde (İç MİY’de) çalışanların tatmini üzerinde etkili olan hususlar araştırılmıştır. Bu bağlamda çalışmada, İç Müşteri İlişkileri Yönetiminin boyutları (iç müşteri tatmini, etkili yöneticilik, iç müşteri odaklı kültür ve davranış, teknolojik yeterlilik, işbirliği ve iletişim) arasında ilişkinin yönü; çalışanların sosyo-demografik özellikleri ile iç müşteri tatmini ve işbirliği/iletişim arasındaki ilişki; yönetim biçimlerine göre iç müşteri tatminin farklılık gösterip göstermediği tespit edilmiştir. Ayrıca iç müşteri tatmini üzerinde etkili olan hususların ağırlıkları ortaya konularak iç müşteri tatminin sağlanmasına yönelik çeşitli öneriler sunulmuştur.

**Anahtar kelimeler:** İç müşteri tatmini, İç MİY, İşbirliği ve iletişim, İç müşteri odaklılık, Etkili yöneticilik, Türkiye’de beyaz eşya sektörü.

### I. INTRODUCTION

Internal Customer Relationship Management (IntCRM) aims at contributing to the application of the Customer Relationship Management (CRM), evaluating the factors in the company systematically. IntCRM is a process evaluating cultural values social relations, level of knowledge, knowledge share, the manners and behaviors of the service-givers and the directors towards the external customers in the organization (Eichorn, 2004:168).

In a successful Customer Relationship Management (CRM), a system of human sources, model of behaviors and human support are needed more than the technology. In the studies carried out on various industries, it has been determined that the importance and the participation of the human factor have been in the foreground in a successful CRM application (Panaro & Goverin 2004:26). Because human factor is an important aspect of the CRM, people have key roles in the application and development of the CRM. If people are not included in the CRM strategy, CRM strategy will be just a so-called application and the required results will not be acquired. As the happiness of external customers is provided by the internal customers, first of all, it is necessary to establish and develop relations with internal customers.

The management should not include the employees in the CRM applications by making various promises or taking them in. Before applying such a strategy, the reasons for putting this application into practice should be explained to the employees thoroughly and made understood by them. Undetermined vision, bad communication, not being able to induce the employees, and negative motivation affect all the employees in the CRM application negatively. An effective and open communication system between the service-givers and the directors increases the knowledge share. When sharing is at a high level, it will enable that all the processes about IntCRM and CRM more easily. Open communication, making clear the oral rules in the organization will help to define the relations in the organization.

This case will contribute to change the structure of the organization particularly for a successful CRM strategy. Determining each activity about internal CRM in a clear way in the CRM applications will eliminate fears and worries of the employees and prepare an environment to make them ready for change. The most important of all is to make the employees feel that they are more superior to any part of a machine (Meltzer, 2003:3-6). The level of satisfaction of employees is effective in achieving these factors. An employee with a high level of satisfaction will be open to new applications with his/her manners and behaviors as well as have a high level of success. Therefore, in this study, the conditions effective in providing internal customer satisfaction in the IntCRM in manufacturing-industry companies have been handled and examined.

## **II. THEORETICAL BACKGROUND**

### **A) The Definition and the Scope of the Internal Customer Relationship Management**

Internal customer implies a person that works in an organization. The concept of internal customer has an important place in improving the activities in the process of production and service giving. Each unit and section is the customer of the stages prior to itself (Ersen, 1997:25).

CRM aims at providing the profitability and continuity of the customers rather than increasing the volume of interaction with the customers. It puts forward that the technical and the human sources should be used efficiently in actualizing this. Although many companies consider CRM as a technical system in application, CRM is a strategic action and process with human properties. CRM has three dimensions (Gray and Byun, 2001:7-8). These are:

**1. Customer:** Customer is the main source for the present and future development of a company. However, not all the customers are sources of income for a company. Customers that provide a real income to the company are determined through looking for profitable customers and collecting and analyzing enough knowledge about these customers. Today, information technologies are used to a great extent in determining target customers and selecting the ones that provide a permanent income to company among these customers. Therefore, all the main processes such as work processes, management processes, marketing and human resources should be focused on customer.

**2. Relationship:** CRM is a process that organizes and directs the relations between company and customers that provides the improvement of the relations with current customers, gaining new customers, keeping the profitable customers and the permanence of the relations (Alagöz, 2004:15). "Relationship", one of the main elements of CRM, is a dual interaction or communication process between a company and its internal/external customers. The level of relationship can be determined by the company and the customers. The relationship can be short or long term, as well as it may be intermittent or for once. Even if the customers have a positive manner towards the company, product or the service, their manner during the purchase of a product or service is instant and they may behave according to the situation at that time. Therefore, CRM tries to manage the relations with the customers in accordance with the benefits of the company and benefits of the customers considering the life-long values of the customers

**3. Management:** CRM is not an activity only at the marketing department. Rather, CRM covers common sharing and change in the culture and process of the company. Information about the customers, marketing opportunities are brought to the level of knowledge usable at all levels of company and used at all the departments. CRM requires comprehensive changes in the organization and needs the participation of the employees.

CRM is to put forward what customers provide you with and what else you know about a customer after you have changed your behavior according to an individual customer voluntarily (Peng, 2003:19-20). CRM is a company strategy that puts the organizational structure, culture and information technologies in a certain order during interaction with a customer in order to increase long-term satisfaction of the target customers and profit of the company (Defazio, 2003:1-2). CRM is a strategy that makes the individualized relations with the customers possible and aims at increasing customer satisfaction and maximizing profits and defining the most profitable customers and giving service to them at the highest level (Eichorn, 2004:168).

Internal Customer Relationship Management (IntCRM) aims at contributing to the application of CRM to a great extent, evaluating the factors in company in a systematic way. IntCRM is a process evaluating cultural values in company, social relations, knowledge level, knowledge share and manners and behaviors of the employees and directors towards external customers. The dimensions of the IntCRM are internal customer satisfaction, effective management, customer-focused culture and behavior, technological sufficiency and cooperation/communication (Eichorn, 2004:168).

### **B) Internal Customer Satisfaction (Employees' Satisfaction)**

The satisfaction of the internal customer is effective in ensuring the satisfaction of the external customers in CRM. Therefore, it is necessary that the companies give importance to the satisfaction of the internal customers, as well as to the satisfaction of the external customers. The following factors are effective in ensuring the satisfaction of the internal customers; being familiar with each internal customer, handling and solving their problems individually, understanding internal customers and developing strategies that will meet their expectations and needs. Management should determine more realistic targets involving the internal customers in plans made/to be made. Management should include views and ideas of internal customers in decision-making process when making and applying decisions. All the factors impeding the development of internal customers should be eliminated by constructing an open communication with them, establishing a fair rewarding system to encourage internal customers, putting forward opportunities to increase satisfaction of internal customers, and by ensuring that problems of internal customers are solved in a more rapid way (Pfau, et. al. 1991:10-12). As Hagemann (1997) states, the criticism of an employee such as "I haven't heard even a word from my employer. I would prefer to hear some individual words and some

comment on what I do rather than a Christmas present so that I could understand where I am” is a sign of being unsatisfied. If such kind of dissatisfaction becomes a life experience, people start bowing to their destiny. An uninterestedness coming out within oneself occurs (p.66).

### **C) Effective Management**

An effective manager –like a leader- puts himself/herself into the realities peculiar to other employees and managers so that s/he understands and accepts them. In order to do this, it is necessary that s/he give place to employees and other managers, establish relationship with their desires and needs and identify with them. (Geisler, 2003:16). Managers shouldn't bring the problems of their private life to their business life and they shouldn't be always busy with them. In the same way, they shouldn't carry problems related to their business life to their private life. Managers should point out three aspects about CRM to employees. First one is to indicate the perfectness in the present work; second one is to ensure learning in the processes about CRM; third one is to make work place an entertaining place. A successful manager is the one who can balance all these three factors. The fact that managers are interested in employees individually, they call them with their names and admire them increases motivation (Jauhari, 2001:153-154).

### **D) Communication and Cooperation**

Communication is not a concept carried out with only external customers, communication in an organization is also important. The effect of communication on sharing responsibility in an organization is great. According to findings, communication has effect on both business policy and decision making processes of management. There must be an open communication process in ensuring full-participation in decisions taken by management. Fidelity or responsibility between employees/managers is strengthened through an effective communication. It is also possible to understand whether tasks carried out are in accordance with their purposes through communication in organization (De Ridder, 2004:3). Cooperation consists of communication to a hundred percent. Internal customers share their expectations and desires within organization with each other through communication. Ambiguities are eliminated through communication and a management process dependent upon cooperation takes place (Hagemann, 1997:50). Cooperation is manners and behaviors that employees and managers have in improving mutual relations between inter-functional relations. These manners and behaviors are as following (Eichorn, 2004:168-170):

- Relations: This means that all service-givers and managers improve their social relations with service-givers and managers from their own departments and with employees and managers from other departments inside and outside the organization.

- Effective communication: Effective communication involves structural processes in determining targets and strategies, in determining crucial subjects and in solving problems.

- Relationship skills: It is the process of improving level of communication and improving communication skills between managers and service-givers in forming an effective team.

### **E) Organization Culture (Manners and Behaviors)**

Culture of institution or organization is a sign of whether employees' behaviors are customer-focused or not. It is quite important that culture of institution supports rewarding system and authorities of employees to decide on benefits of each other and external customers (Kırım, 2001:147). It is beneficial to consider the following factors about organization culture in the applications of CRM and Internal CRM (Gallagher, 2004; Loftis, 2005);

- Respect: Respect is an important factor for customers and employees. Even if companies have good will in deciding upon their daily business activities, their decisions may not have positive results if they have not developed a respect culture. Full-participation and support of

employees is necessary in forming a respect culture in CRM. Respect for customer, respects for managers, respect for colleagues and respect for environment are the underlying factors of a successful CRM application.

-Getting familiar with customers: Knowing about internal customers of a company and understanding them is one of the most important properties of CRM.

-Team work: Team work is of great importance in establishing an organization suitable for the structure of CRM and in realizing the responsibilities. Team work has a continuous structure for a certain objective and target. The team work shared in the organization will be efficient in increasing the success of CRM.

-Complying with change: An ideal CRM strategy and the fact that the structure of the organization supports a continuous reformation will affect the quality of the services given to the customers in a positive way. Besides this, the organization culture should support this in order to enable the internal and external customers to have a voice in the process of change.

-To apply a coordinated, customer-focused strategy: A company should develop an internal and external customer focused strategy providing the coordination of the company functions within themselves in order to enlarge the functional boundaries of CRM.

-To form an organization structure friendly with CRM: The whole organizational structure should be in cooperation with the basic functions of the company for a successful CRM application.

-To establish a CRM based on mutual understanding within the organization: Three aspects of the organization culture may be influential in the CRM applications. The first one is capability and voluntariness. This contributes to change the ideas about change and processes in the work in a positive way. The second is to make the sharing strategies easy and spread by grading the work units according to tasks. The third one is to establish the support for CRM applications in all stages of the management.

-A cultural structure established based on customer knowledge: One of the most important aspects of a successful CRM program is the knowledge of internal and external customers. This knowledge helps the company to determine the profile of the target customers and helps the service-givers and managers to realize the within-organization functions in line with the customer knowledge.

Not only the technical system and strategy managers but also the workers at all levels of the organization should be responsible for the conformity of the CRM to a company. Most of the companies have been unsuccessful in application although they have allocated enough time and budget for CRM applications. Because these companies have not take the cultural elements such as full participation, trust, communication and respect into consideration. As this deficit has been recognized and an organization culture has been developed, the desired results began to be obtained (Puschmann and Alt, 2004:6).

## **F) Information Technologies**

Information technologies is a term to define the technologies which enable some processes such as saving and storing data, producing knowledge after certain processes, accessing, storing and sharing this knowledge to be conducted in an efficient and productive way. Information technologies used in organizations consist of computers, information input and output hardware and communication tools. All the technologies which enable to collect knowledge, process, store it and to transmit it to anywhere when necessary or to access to it from anywhere through electronic and optic etc. techniques automatically can be defined as information technologies (Seyran, 2000: 94).

### **III. METHOD**

#### **A) A Study on the Satisfaction of the Employees in Customer Relationship Management**

It has been observed that certain factors are important in the satisfaction of the internal customers in the previous studies. Koys (2001) has emphasized that there is an important relationship between the productivity of a company and the satisfaction level of the employees, customer satisfaction, organizational citizenship behavior, the circulation of the employees. Harter et. al. (2002) has put forward that there is a relationship between the participation and satisfaction of the employees and external customer satisfaction, productivity, profitability, employees' fidelity and work security. Matzler et. al. (2004) has focused on employees satisfaction, customer satisfaction, productivity and company performance and put forward that some variables such as managers, work, wage, responsibility and acceptance are influential in the general satisfaction of the employees.

In this study like Koys (2001), Harter et. al. (2002) and Matzler et. al. (2004) the effects of the socio-demographic characteristics of employees, effective directorship, employee-focused culture and behavior, technological sufficiency and cooperation/communication on the satisfaction of the employees in CRM in a X industrial-manufacturing have been searched and the results have been given under the findings of the study are consistent with those studies.

#### **1) The Purpose and Topic of the Study**

The topic of the study is to put forward the relations between the factors influential in the satisfaction of the employees working in the Internal Customer Relationship Management in a X company in the manufacturing and industrial sector and to put forward the strength of these factors.

The basic purpose of this study is to put forward the effects of effective management, internal customer focused culture and behavior, technological sufficiency on the satisfaction of employees in the Internal Customer Relationship Management in a X industrial company functioning in the white goods sector which constitute a major part of the manufacturing and industrial sector and to determine the direction of the relations among these factors and of the relations between the socio-demographic characteristics of employees.

#### **2) The Scope of the Study and its Limitations**

The population of this study is the service-givers and managers of the X industrial company. The major limitation of the study is to involve the employees of only one industrial company. In spite of this limitation, it is suggested that the results of the study can provide important implications for the employees and managers in the other manufacturing and industrial companies.

#### **3) Data and Information Collecting Method**

Face-to-face survey method has been used in collecting data and information in the study. Literature review has been made before preparing the questionnaire. The basic variables found out during the literature review have been put forward in "Study Variables and Model" part. The questionnaires have been completed by employees and managers working in one of the factories of the company X in Ankara. In order to ensure that questionnaires have been filled in carefully and returned, the required flexibility in time has been provided.

#### 4) The Model and Variables of the Study

The study model is given in Figure 1. In the study model, there are variables related to socio-demographic characteristics of the employees and managers and management type of the company and the dimensions of the Internal Customer Relationship Management (effective management, internal customer focused culture and behavior, technological sufficiency, cooperation and communication, employees' satisfaction). The scale used to measure the dimensions of the Internal Customer Relationship Management has been adopted from Eichorn (2004).

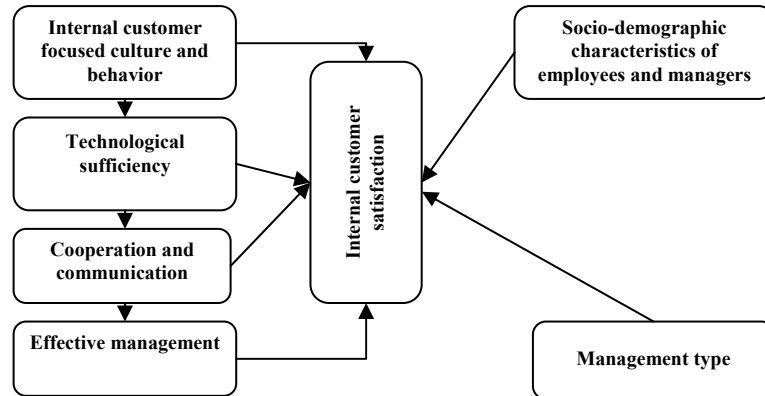


Figure 1. Model of Study (adapted from Eichorn, 2004).

#### 5) The Hypotheses of the Study and Analyses Made in Testing the Hypotheses

The hypotheses developed in accordance with the purpose of the study and the statistical analyses employed to test these hypotheses are given in Table 1.

Table 1. The hypotheses of the study and the statistical analyses used in the hypotheses

Hypotheses	Statistical Analyses
1. H <sub>1</sub> : There is a positive relationship between the dimensions of Internal Customer Relations Management	Pearson Correlation Analysis
2. H <sub>1</sub> : There is a positive relationship between internal customer (employee) satisfaction and effective management, internal customer focused culture and behavior, technological sufficiency and cooperation/communication.	Pearson Correlation Analysis
3. H <sub>1</sub> : There is a relationship between socio-demographic characteristics of the employees, and the internal customer satisfaction.	Kendall's Correlation Analysis
4. H <sub>1</sub> : The internal customer satisfaction varies according to the management type of the company.	Multiple ANOVA Test
5. H <sub>1</sub> : Effective management, internal customer focused culture and behavior, technological sufficiency and cooperation/communication have effects on the internal customer (employee) satisfaction.	Regression Analysis

#### IV. THE FINDINGS OF THE STUDY

Socio-demographic characteristics have been determined using SPSS 13.00 program in order to explain the findings of the study as a whole. Then, various analyses have been used in accordance with the aims and hypotheses of the study. These analyses are; socio-demographic characteristics, reliability analysis, factor analysis, correlation, regression analysis and Multiple Anova Test.

As shown in Table 2, the 21.6% of the employees and managers in the study stated that the management type was guiding-directing management, 13.5% participatory management, 22.5% authoritarian management, 39.6% customer-employee focused management and 2.7% other (participatory, guiding and Total Quality Management).

Table 2. The management type of the company

Management Type	Frequency	%
Guiding-Directing Management	24	21,6
Participatory Management	15	13,5
Authoritarian Management	25	22,5
Customer-Employee Focused Management	44	39,6
Other	3	2,7
<b>Total</b>	<b>111</b>	<b>100,0</b>

Table 3 gives descriptive information about the socio-demographic characteristics of the employees of the company involved in the study. In the table 3, the socio-demographic characteristics of the employees and managers in the X industrial company included in the study are presented. 29,7 percent of them is female, while the remaining 70,3 percent is male. 45 percent of the participants hold high school degrees, 37,8 percent of them hold undergraduate degrees, and 16,2 percent has graduate degrees. It is exhibited that while the length of employment in the sector is 1-3 years for 20,7 percent of the participants 4-7 years for 14,4 percent of them, 8–10 years for 23,4 percent of them, and more than 10 years for %39,6 of them. Finally, the percentages for the length of the employment in this company is 1-3 years for 29,7 percent of the participants 4-7 years for 15,3 percent of them, 8–10 years for 16,2 percent of them, and more than 10 years for %34,2 of them.

**Reliability Analysis:** Cronbach Alpha Coefficient was used in the reliability analysis of this study. Cronbach Alpha Coefficient examines whether n number of questions in the scale constitute a whole in order to explain a homogeneous structure. Alpha coefficient is a coefficient which puts forward the similarity and closeness between the questions when individual scores are found out by adding up the answers to the questions in a scale including k questions. If there is a strong correlation between the questions, Cronbach Alpha Coefficient is high and this indicates that the reliability of the scale is high. If the interval in which the alpha coefficient and therefore the reliability of the scale will be is  $0.00 \leq \alpha < 0.40$ , the scale is not reliable; if it is  $0.40 \leq \alpha < 0.60$ , the scale has low reliability; if it is  $0.60 \leq \alpha < 0.80$ , the scale is quite reliable and if it is  $0.80 \leq \alpha < 1.00$ , the scale is highly reliable (Akgül and Çevik, 2003:428-435). Reliability analysis was done taking the likert scale 1) *Strongly disagree*, 2) *Disagree*, 3) *Neither agree nor disagree*, 4) *Agree*, and 5) *Strongly agree* as basis and it is given in table 3 as a summary.



Table 3. The socio-demographic characteristics of the employees and dhe managers

<b>Demographic characteristics</b>	<b>Frequency</b>	<b>%</b>	<b>Demographic characteristics</b>	<b>Frequency</b>	<b>%</b>
<b><u>Gender</u></b>			<b><u>Length of employment in this company</u></b>		
Female	33	29,7	Less than 1 year	5	4,5
Male	78	70,3	1-3 years	33	29,7
<b>Total</b>	<b>111</b>	<b>100,0</b>	4-7 years	17	15,3
<b><u>Education Level</u></b>			8-10 years	18	16,2
High school	50	45,0	More than 10 years	38	34,2
Faculty-University	42	37,8	<b>Total</b>	<b>111</b>	<b>100,0</b>
MA	18	16,2	<b><u>Job</u></b>		
PhD	1	,9	Engineer of product development	12	10,8
<b>Total</b>	<b>111</b>	<b>100,0</b>	Engineer of production planning	5	4,5
<b><u>Age Range</u></b>			Member of production planning	5	4,5
18-25	12	10,8	expert of finance	1	,9
26-30	34	30,6	engineer of process	4	3,6
31-35	34	30,6	operator	13	11,7
36-40	26	23,4	designer	2	1,8
41-45	5	4,5	worker	37	33,3
<b>Total</b>	<b>111</b>	<b>100,0</b>	technician	2	1,8
<b><u>Length of employment in the sector</u></b>			Mechanic engineer	7	6,3
Less than 1 year	2	1,8	Expert of human resources	9	8,1
1-3 years	23	20,7	Assistant director	1	,9
4-7 years	16	14,4	graphic artist	5	4,5
8-10 years	26	23,4	engineer of quality guarantee	3	2,7
More than 10 years	44	39,6	manager	5	4,5
<b>Total</b>	<b>111</b>	<b>100,0</b>	<b>Total</b>	<b>111</b>	<b>100,0</b>

The alpha coefficients about the scales are given in the Table 4. While the initial coefficient of the scale developed to measure the cooperation and communication process was .40, the coefficient reached to .78 as 2nd and 8th variables were deleted from the scale. Besides this, as the 8th variable was deleted from the scale applied to measure the internal customer satisfaction, the coefficient of this scale reached to .85. Therefore, the alpha coefficients of these scales have reached to a highly reliable level. The variables deleted from the scales were not included in the factor analysis.

**Factor Analysis for the Dimensions of the Internal Customer Relationship Management:** Working with a lot of variables in field works may cause difficulty for the researchers in terms of time and financial issues. Therefore, reducing as many variables as possible to certain variables is of great importance to reach a conclusion in a shorter time.

Table 4. The results of the reliability analysis of the scales used in the study

Scales	Alpha Coefficient of the Scale	Alpha Coefficient of the Scale when the variable is deleted	The variables deleted from the Scale
Efficient management (8 variables)	<b>.86</b>	-	-
Internal Customer focused culture and behaviors (8 variables)	<b>.87</b>	-	-
Technological sufficiency (8 variables)	<b>.89</b>	-	-
Internal customer (employee) satisfaction (8 variables)	<b>.81</b>	<b>.85</b>	(8. variable)
Cooperation and communication process (8 variables)	<b>.40</b>	<b>.78</b>	(2. and 8. variables)

Table 5 puts forward the variable numbers, factor direction, eigenvalue, variance that has been put forward, the results of the sample sufficiency test and the results of the Barlett test about the scales administered to the service-givers and managers of the X industrial company within the framework of the study. Kaiser-Meyer-Olkin (KMO) is used in order to test the sample sufficiency. It is one of the values showing the validity of the factor analysis. KMO is a rate and it is required to be above 60 % (Nakip, 2003:409; Tabachnick and Fidel, 2001:589). Barlett Test (Barlett Test of Sphericity) is used to test whether correlation matrix is the unit matrix in which all the diagonal terms are 1 or the terms which are not diagonal are 0. Eigenvalue is the sum total of the variances put forward by each factor.

The mean of the squares of the weights in a column is found by dividing the eigenvalue by the number of the variances in the column. The variance put forward is the sum total of the variances put forward by each variable. Alpha method and Cronbach Alpha Coefficient investigate whether n questions in the scale form a whole to explain a homogeneous structure. Factor loadings show the relationship between the variables in a factor and the factor.

The higher the factor loading value is, the higher the degree of explaining that structure and concept. The fact that the factor loading value is .45 or higher is a good criterion for selection (Büyüköztürk, 2002:118). According to another source the factor loading should be .30 and higher for data (observation) the number of which is 350 and above. The loadings above .50 are accepted as quite good (Albayrak et. al, 2005:330). In conclusion, it can be said that the statistical values belonging to the scales about the dimensions of the Int.CRM are appropriate for the factor analysis in the study.

IntCRM have been explained through five factors in Table 5. Factor 1: Effective Management; this factor consists of 8 sub-variables that may be effective in the management rationale within the company. Factor 2: Internal Customer Centered Culture and Behavior; the variables consist of 8 basic variables that are effective in forming the culture and behavior towards employees and managers. Factor 3: Technological sufficiency; consists of 8 variables developed to determine the technological sufficiency in the company. Factor 4: Internal Customer Satisfaction; consists of variables developed to measure the satisfaction of the employees and managers. Two variables the factor loading of which was below .40 have been deleted. Factor 5: Cooperation and Communication; consists of variables developed to

determine the communication and cooperation between the individuals and departments in the company. A variable the factor burden of which was below .40 has been deleted.

Table 5. Factor analysis on the dimensions of the internal customer relationship management

<b>Factors and Variables</b>	<b>No</b>	<b>Factor loadings</b>	<b>Eigenvalue</b>	<b>% of Variance</b>
<b>Factor 1: Effective Management</b>			4,40	55,01
Managers demonstrate high levels of integrity when making decisions.	1	.48		
Managers explore, identify, or define the nature, causes, and implications of problems.	2	.67		
Managers demonstrate consistency between espoused objectives and actions.	3	.77		
Managers understand day to day business operations.	4	.70		
Managers actively communicate and build relationships among key stakeholders.	5	.71		
Managers possess the technical competencies to achieve the business goals and objectives.	6	.73		
Managers align the team's visions, values, goals, and action plans.	7	.81		
Managers consistently and clearly communicate the desired results, processes and plans.	8	.67		
<b>K-M-O= ,88; Barlett Test of Sphericity = 387,45 p&lt;0.001</b>				
<b>Factor 2: Customer centered culture and behavior</b>			3,9	58,00
Employees are encouraged to treat internal customers with the same level of quality and service as external customers.	1	.74		
Employees are praised and rewarded for providing excellent internal support and customer service.	2	.64		
Employees have the authority to make decisions and solve internal customer problems without seeking supervisor authority.	3	.67		
Employees are trained, technically competent professionals eager to provide excellent quality and customer-service.	4	.64		
Employees work with business users to set priorities for system delivery, enhancements, or ad-hoc requests.	5	.65		
Managers lead by example with regards to excellent internal support and service.	6	.76		
Managers clearly emphasize the importance and value of providing excellent customer-service internally and externally.	7	.75		
Managers communicate and share internal customer feedback and perceptions of service quality.	8	.72		
<b>K-M-O= ,84; Barlett Test of Sphericity = 399,45 p&lt;0.001</b>				

Table 5. (Continue)

Factors and Variables	No	Factor loadings	Eigenvalue	% of Variance
<b>Factor 3: Technological sufficiency</b>			4,35	62,25
The platform provides a comprehensive source of data and information that meets most or all of your data needs.	1	.77		
The data and information accurately and reliably reflect the source system data.	2	.79		
The software tools and data manipulation capabilities meet your operational and processing requirements.	3	.76		
The process for requesting and tracking enhancements or assistance is clear and easy to use.	4	.75		
The roles and responsibilities of the support team are clearly communicated and understood.	5	.71		
The platform provides tools for user support and assistance such as new user assistance, system documentation and a help desk.	6	.67		
The platform facilitates information and knowledge sharing across the organization.	7	.68		
The system performance (response time, availability) adequately meets my needs.	8	.65		
<b>K-M-O= ,87; Barlett Test of Sphericity = 475,55 p&lt;0.001</b>				
<b>Factor 4: Internal Customer Satisfaction</b>			3,83	54,75
Compensation and benefits are adequately correlated with your roles and responsibilities and there is a compensatory link to performance.	1	.75		
Your immediate workplace is a pleasant environment free of excessive tension, stress, insecurity or distrust among co-workers.	2	.71		
Company policies are clearly communicated and equitably administered across the organization.	3	.81		
You have frequent opportunities for continued training, development or advancement.	4	.76		
You receive regular and appropriate feedback regarding your performance, including praise and criticism.	5	.73		
Your immediate managers are competent in their roles and responsibilities including decision making, setting goals and objectives and providing direction and guidance to the team.	6	.64		
You have opportunities to use your own judgment, creativity or expertise in solving problems.	7	.78		
<b>K-M-O= ,86; Barlett Test of Sphericity =326,30 p&lt;0.001</b>				

Table 5. (Continue)

Factors and Variables	No	Factor loadings	Eigenvalue	% of Variance
<b>Factor 4: Internal Customer Satisfaction</b>			3,83	54,75
Compensation and benefits are adequately correlated with your roles and responsibilities and there is a compensatory link to performance.	1	.75		
Your immediate workplace is a pleasant environment free of excessive tension, stress, insecurity or distrust among co-workers.	2	.71		
Company policies are clearly communicated and equitably administered across the organization.	3	.81		
You have frequent opportunities for continued training, development or advancement.	4	.76		
You receive regular and appropriate feedback regarding your performance, including praise and criticism.	5	.73		
Your immediate managers are competent in their roles and responsibilities including decision making, setting goals and objectives and providing direction and guidance to the team.	6	.64		
You have opportunities to use your own judgment, creativity or expertise in solving problems.	7	.78		
<b>K-M-O= ,86; Barlett Test of Sphericity =326,30 p&lt;0.001</b>				
<b>Factor 5: Cooperation and Communication</b>			3,24	54
Cross-functional team recognition programs and incentives exist and are supported.	1	.84		
The organization uses rigorous project management standards and techniques for large initiatives.	3	.72		
Conflicts of authority, power struggles and other “turf wars” on projects, initiatives and decisions are a rare occurrence.	4	.68		
Budgets exist to support team and relationship-building activities, cross-training etc.	5	.56		
Business units are encouraged to seek opportunities to collaborate on initiatives and technology investments, with a focus on sharing and leveraging resources across the organization.	6	.69		
Business units are discouraged from creating or using their own independent data and information sources for decision making.	7	.87		
<b>K-M-O=,80;Barlett Test of Sphericity =240,127 p&lt;0.001</b>				

**Correlation Analysis:** The test results of the hypotheses put forward based on the relations according to the aim and the model of the study have been given in Table 6 and Table 7.

Table 6. The relations between the dimensions of the IntCRM

	Mean	Std. D.		1	2	3	4	5
<b>1) Internal Customer Satisfaction</b>	3,77	,61	<b>r</b>	1				
			<b>p</b>	.				
			<b>n</b>	111				
<b>2) Effective Management</b>	4,16	,49	<b>r</b>	,567(**)	1			
			<b>p</b>	,000	.			
			<b>n</b>	111	111			
<b>3) Customer Centered Culture and Behaviour</b>	3,91	,59	<b>r</b>	,639(**)	,770(**)	1		
			<b>p</b>	,000	,000	.		
			<b>n</b>	111	111	111		
<b>4) Technological Sufficiency</b>	4,11	,51	<b>r</b>	,631(**)	,585(**)	,636(**)	1	
			<b>p</b>	,000	,000	,000	.	
			<b>n</b>	111	111	111	111	
<b>5) Cooperation and communication</b>	3,90	,53	<b>r</b>	,686(**)	,406(**)	,505(**)	,583(**)	1
			<b>p</b>	,000	,000	,000	,000	.
			<b>n</b>	111	111	111	111	111

\*\* Correlation analysis is significant at  $p < 0.01$ .

The results of the Pearson Correlation analysis about the 1st and 2nd hypothesis of the study are given in the table. When the results of the analysis are considered, it is seen that there is a positive relationship between the dimensions of the Internal Customer Relationship Management. Therefore, the 1st hypothesis of the study “H<sub>1</sub>: There is a positive relationship between the dimensions of the Internal Customer Relationship Management.” is confirmed. In addition, the results of the analysis confirm the 2nd hypothesis of the study, which is there is a positive relationship between internal customer satisfaction and other IntCRM dimensions, which are effective management, internal customer-centered culture and behavior, technological sufficiency, and cooperation/communication.

Table 7. The relations between internal customer satisfaction, cooperation/communication and the socio-demographic characteristics of the employees

		Level of Education	Age	How long s/he has worked in this sector	How long s/he has worked in this company
<b>Internal Customer Satisfaction</b>	<b>r</b>	,007	,105	,155	,139
<b>Cooperation and Communication</b>	<b>r</b>	-,045	,118	,108	,090
	<b>n</b>	111	111	111	111

Note: Correlation coefficient is significant at  $p < 0.05$ .

Table 7 presents the results of the Kendal's Correlation analysis administered to determine the direction of the relationship between internal customer satisfaction, cooperation/communication and the socio-demographic characteristics. While it has been found out that there is a positive relationship between internal customer satisfaction and level of education, age, how long s/he has worked in this sector, how long s/he has worked in the same company, there is a negative relationship between internal customer satisfaction. The analysis about the relationship between cooperation, communication and employees' socio-demographic characteristics is also given in the table. While there is a positive relationship between cooperation, communication and age, how long s/he has worked in this sector, how long s/he has worked in the same company; there is a negative relationship between cooperation/communication and level of education. The higher the level of education, the less the amount of cooperation and communication among the employees.

**The Results of the Regression Analysis:** Regression analysis is used in order to investigate the relationship between the dependent and independent variable(s). Enter method was used in the study. In the enter method, the effects of the independent variables on the dependent variable are determined (Albayrak et. al, 2005:260). In the study, the dependent variable is internal customer satisfaction; independent variables are effective management, customer-centered culture and behavior, technological sufficiency, cooperation and communication. In conclusion, the relationship between the dependent variable and independent variable was investigated and the results are given in Tables 8 and 9.

Table 8. Anova Test results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	25,48	4	6,37	41,52	,000
Residual	16,26	106	,15		
Total	41,74	110			

In the table 8, the results of the anova test administered to test whether the model is significant as a whole are given. In the table, 41,52 F value at the (Sig.=,000) level shows that our model is significant at all levels as a whole.

In the following table, the results about the coefficients are given. Constant, B and  $\beta$  coefficients of the variables, t values, sig. levels, and variance explained ( $R^2$ ) and the results of the Durbin-Watson test showing whether there is an autocorrelation in the model are presented in the table.

Table 9. Coefficients table

Model 1	B	$\beta$	t	Sig.	R	R Square	Adjusted R Square	Durbin-Watson
					,781 <sup>a</sup>	,610	,596	1,600
<b>(Constant)</b>	-,522		-1,41	,159				
Effective management	,156	<b>,126</b>	1,29	,197				
Customer-centered culture and behavior	,227	<b>,219</b>	2,10	,037				
Technological sufficiency	,205	<b>,171</b>	1,96	,052				
Cooperation and communication	,490	<b>,424</b>	5,55	,000				

Note: Independents variables: Effective management, customer-centered culture and behavior, technological sufficiency, cooperation and communication; Dependent variable: internal customer satisfaction

61% of the variance is explained by the independent variables in the table 9. The remaining 39% variance is explained by other variables not included in the model through error term. In other words, if all the other conditions in the company are held stable, internal customer satisfaction is influenced directly by independent variables. When the  $\beta$  coefficients are considered, cooperation and communication are the most influential variables on the dependent variable (internal customer satisfaction), and the least influential variable is the effective management. If the t values at 0.05 significance level are considered, effective management is found to be insignificant when included in the model; all the other variables are significant.

When the B value is considered, if the value of the independent variables is zero, internal customer satisfaction is found to be negative. The fact that the coefficient values of the independent variables are positive shows that there is a positive relationship between independent variables and internal customer satisfaction. As the value of the independent variables increase, internal customer satisfaction increases as well. In addition, the result of the Durbin-Watson test is presented in the table. If the Durbin-Watson value is between 1.5 and 2.5, there is no autocorrelation in the model. As this value is 1.6 in this study, there is no autocorrelation in the model.

**Multiple ANOVA Test:** The question whether the internal employee satisfaction vary in accordance with the management type is examined by means of Multiple ANOVA Test; and the findings are presented in Table 10 and Table 11.

Table 10. Descriptives

Dependent Variable	Factor: Management Type							
	A		B		C		D	
	N= 24		N=15		N=25		N=44	
Internal Customer Satisfaction	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
	<b>3,89</b>	,612	<b>3,71</b>	,485	<b>3,44</b>	,852	<b>3,92</b>	,516

Note: A: Guiding-Directing Management, B: Participatory Management, C: Authoritarian Management, D: Customer-Employee Focused Management

Table 10 exhibits the mean and Standard deviation values for management type. When the means about the management types are considered, it is seen that A (3,89), B (3,71), C (3,44) and D is (3,92).

Table 11. Test of Homogeneity of Variances and ANOVA

Variable	Levene Statistic	Sig.	F	Sig.	Post Hoc Tests (Scheffe)
Internal customer (employee) satisfaction	2,090	,087	3,017	,021	C<B<A<D

Table 11 displays the results of the analysis which is carried out for finding out whether internal customer (employee) satisfaction level varies or not in accordance with the management type. Levene statistics has been determined as 2,090; and sig. is found as, 087. As ,087 value is greater than 0.05 significance level, it has been concluded that there is not a significant difference between the variations of the groups; that is the variations of the groups are equal. The equality of the variations is a prerequisite for the Multiple ANOVA Test. Internal customer (employee) satisfaction can be see that it varies at the significance level of 0,05. While the Internal customer (employee) satisfaction level is highest in *customer-employee*



*focused management, the lowest level of satisfaction is found in authoritarian Management. In this context, the fourth hypothesis of the study, which is stated as “the internal employee satisfaction varies in accordance with the management type”, is affirmed.*

## CONCLUSION AND SUGGESTIONS

In this study, the IntCRM factors influencing the satisfaction of the employees in a manufacturing and industrial organization are investigated. It has been determined that the dimensions of the Internal Customer Relationship Management are influential in the satisfaction of the employees. In addition, the direction of the relation between the management of the company, employees' socio-demographic characteristics and the dimensions of the CRM have been put forward.

This research was carried out X manufacturing and industrial organization which has an important place in the white goods sector in Turkey. Employees and managers who are different from each other in terms of their job, the time period they had been working and their level of education were involved in the research.

Before testing five basic hypotheses developed in accordance with the purpose of the study and model, the reliability and validity analyses about the scales used in the study were made. Therefore, it was determined that the alpha coefficients of all the scales used in the study were above 0.70 which is the lowest level to accept a scale as reliable.

After the reliability analysis about the scales was carried out, the structural validity of the scales was determined through factor analysis. It was observed that the scales could measure all the related concept or the conceptual structures. In that framework, factor analysis was applied to the scales for the dimension of the Internal CRM. According to the results of the analysis, it was determined that there were five different factors. Then, each factor was handled one by one and the total variance of each factor and the loadings showing the relations of the variables with the related factors, the reliability values, eigenvalues and sample sufficiency levels were evaluated. For the results of factor analysis, the total variance and the factor showing the relations of the variables with the factors were taken as the basis. The total variance about the factors is a value above 0.50 in general terms. To sum up, it can be said that the scales had a structure appropriate for the aims of the study according to the results of the reliability analysis and factor analysis.

In the study, it has been determined that there is a positive relationship between the dimensions of the Internal CRM. It has been found out that there is a bilateral positive relationship between internal customer satisfaction and effective management, customer-centered culture and behavior, technological sufficiency, cooperation and communication. In addition, it should be noted that there is a positive relationship between customer-centered culture and behavior and effective management.

The analyses are carried out for determining whether there is a relationship between the selected dimensions of IntCRM (internal customer satisfaction and cooperation/communication) and socio-demographical characteristics of employees, and for determining the direction of this relationship. The analyses demonstrated that there is a positive relationship between internal customer satisfaction and education level, age, the length of employment in the sector, and the length of employment in the company. On the other hand, the relationships between cooperation/communication aspect and education level, age, the length of employment in the sector, and the length of employment in the company are found to be negative. As the level of education rises, the tendency of employees to cooperate and to communicate is seen to diminish. In the study, it has been observed that internal customer satisfaction varied depending on the management types. It has been determined that the internal customer satisfaction is

higher in the customer-employee focused management type when compared with the other management types (guiding-directing management, participatory management, authoritarian management).

As a last point in the study, regression analysis was applied in order to determine how influential the variables that have influence on the internal customer satisfaction. After confirming the validity of the regression model, the ratio at which the independent variables (effective management, customer-centered culture and behavior, technological sufficiency, cooperation and communication) explained the dependent variable (internal customer satisfaction) and the share of the variables were determined. 61% of the dependent variable was explained by the independent variables. The variable that has had the most effect on the dependent variable is communication and cooperation. In addition, a positive relationship between the independent variables and the dependent variable has been determined.

In conclusion, it can be said that the conditions in the company are important in the internal customer satisfaction. Through improving the factors such as effective management, customer-centered culture and behavior, technological sufficiency, cooperation and communication, and the management approach, the internal customer satisfaction will increase significantly. Therefore, new strategies and policies may be developed in that direction in the manufacturing and industrial companies.

The fact that the employees and administrators of only one company were involved in the study is the most important limitation of the study. Therefore, making generalizations may result in misunderstandings. However, the fact that different socio-demographic service-givers and administrators were involved in the study is quite important. As the care was taken in order to involve employees and administrators who are compatible with the general characteristics of the manufacturing and industrial sector in terms of gender, education, the length of work experience and job, the study gives important clues for the future studies.

## REFERENCES

- Akgül, A. ve Çevik, O. (2003). *İstatistiksel Analiz Teknikleri SPSS'te İşletme Yönetimi Uygulamaları*. Ankara: Emek Ofset, ss.428-435.
- Alagöz, B.S. (2004). *CRM kültürünü yerleştirme sürecinde örgütsel dönüşüm ve yeniden yapılanmalar*. Selçuk Üniversitesi, *IV. Ulusal Üretim Araştırmaları Sempozyumu* 8–10 Ekim, Konya, Türkiye, s.15.
- Albayrak, A.S. ve Kalaycı, Ş. (2005). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri*, Ankara: Asil Yayın Dağıtım, s.330.
- Büyüköztürk, Ş. (2002). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Ankara: Pegem Yayıncılık, s. 118.
- De Ridder, J.A. (2004). Organisational communication and supportive employees. *Human Resource Management Journal*, 14:3
- Defazio, V.J. (2003). *Customer service leadership skill and customer relationship management*, University of Phoenix, pp.1-2.
- Eichorn, F.L. (2004). Internal customer relationship management (IntCRM) a framework for achieving customer relationship management from the inside out. *Problems and Perspectives in Management*, 1:154-177.
- Ersen, H. (1997). *Toplam Kalite Ve İnsan Kaynakları Yönetimi İlişkisi, Verimli Ve Etkin Olmanın Yolu*. İstanbul: Sim Matbaacılık, s.25
- Gallagher, R. (2004, August). What role does culture play in CRM. [On-Line] <http://www.summitcircuit.com/archives/s9> [2004, August 26th].
- Geisler, D. (2003). Lider ve diğerleri. *Executive Excellence*, (Ocak):16–17.

- Gray, P. and Byun, J. (2001). Customer relationship management, (March 23): 7-8.
- Hagemann, G. (1997). *Motivasyon El Kitabı* (Çeviren: Göktuğ Aksan). İstanbul: Rota Yayınları, s.50.
- Harter, J. K., Schmidt, F. L. and Hayes, T. L. (2002). Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 8: 268–279.
- Jauhari, V. (2001). Employee and customer management processes for profitability- The case of Hewlett-Packard India. *Journal of Services Research*, 1(1):149-159.
- Kırım, A. (2001). *Strateji ve Bire-Bir Pazarlama CRM*. Ankara: Sistem Yayıncılık, s. 147.
- Koys, D.J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: a unit-level. Longitudinal Study. *Personel Psychology*, 54(1):101–114.
- Loftis, L. (2005, May). Is your organization ready for CRM. [On-Line] <http://www.cutter.com> [2005, May 6th].
- Matzler, K., Fuchs, M. And Schubert. A. (2004). Employee Satisfaction: does Kano's Model apply? *Total Quality Management and Business Excellence*, 15(9–10):1179–1198.
- Meltzer, M. (2003). Customer relationship management, CRM projects mean change, active management techniques, *Harvard Business Review*, January Special Motivational Issue:3-6.
- Nakip, M. (2003). *Pazarlama Araştırmaları Teknikler ve (SPSS Destekli) Uygulamalar*, Ankara: Seçkin Yayıncılık, s.409.
- Panoro, J. and Govern, T.M. (2004). The human customer relationship management. *Benefits Quarterly*, Third Quarter: 26-33.
- Peng, Y.L. (2003). *A Study of the Relationship Between CRM Contents and CRM Benefits-an Application of Fuzzy Set Theory for Hospital*, National Cheng Kung University No. AAT 0618103, pp.19-20.
- Pfau, B., Detzel, D. and Geller, A. (1991). Satisfy your internal customer, *The Journal of Business Strategy*, November/December: 9-14.
- Puschmann, T. and Alt, R. (2004). Successful practices in customer relationship management. *Proceeding of the 37<sup>th</sup> Hawai International Conference on Sciences*, p.6.
- Seyran, C.D. (2000). Bilgi teknolojilerinin Türk işletmelerindeki durumu ve kullanımında ortaya çıkan olumsuzluklar. *Bilim Dergisi* 1: 90-132.
- Tabachnick, B.G. and Fidell, L.S. (2001). *Using Multivariate Statistics*. Needham Heights: A Pearson Education Company, p.589.