



Original Contribution

TOTAL QUALITY MANAGEMENT PRACTICES IN TEXTILE AND CONFECTION CORPORATIONS

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ABSTRACT

Textile and confection sector is one of the leading fields of socio-economical activity, regarding its technological state, economical efficiency and social interaction. Marketing conditions became harder within the recent years of 2000, urging this crucial sector for Turkey's economy to aim taking new and radical measures and bounding it to determine its production system focused on the quality. In this article, we studied the effects of quality management practices in difficult marketing conditions, regarding the competitive capability of textile industry.

Key Words: Textile, confection, Total Quality Management, corporation

INTRODUCTION

Technological development forces individuals and community to change. Total Quality Management is also one of the consequences this change has obliged to us. Total Quality Management intends to embrace participating administration and benefit from the creative power of its employees₁.

Total quality and performance is the investment made in human resources. And the prior condition of competition. To resolve issues before they become a problem. It's a process of changing and advancing constantly. It's a life and management philosophy (3). The thought of Total Quality is providing customer satisfaction with active participation of all individuals in a corporation, resulting profitability. Meanwhile Total Quality Management is a corporation management model, based on total participation of all employees, providing customer satisfaction with long term objectives, aiming to gain profits for the coexisting community and individuals while focusing on quality (4).

Textile sector is so important for Turkey. When we examine the sectors structure, we realize that quality is essential. In this point of view, textile is the sector that needs Total Quality Management the most (6). Just launching cheap products is not enough to compete in world markets, qualified products must be the intention and persistence of quality must be provided. The concept of Total Quality Management has to be adopted and given importance (2).

MATERIALS AND METHODS

In this study performed to determine the aspect for Total Quality Management of active corporations in Trakya Region, we used surveying technique by questioning in person. The process is performed with 113 textile corporations chosen from 457 corporations showing activity in 3 cities of Trakya Region, using sampling methods with a %95 confidence interval and %8 margins of error. While analyzing the survey results, we primarily used numbers and rates and commented on the results. To determine the priority of some factors and criteria for corporations we used Quinary Likert Scale, and asked corporations to rate them in an importance scale. We also performed a one way variant analysis (ANOVA) to see if TQM

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procedures vary with the size of corporations in Trakya Region.

In the tables below, you can see the number and ratios of employees working for

textile corporations in Trakya Region, as well as number and ratio tables for TQM procedures.

Table 1. Personnel numbers in corporations

	Number	Ratio (%)
1-50	7	6.2
51-250	42	37.2
251-500	32	28.3
501-1000	24	21.2
1001-2000	7	6.2
Non Responding	1	.9
Total	113	100.0

As you can see, in textile corporations of Trakya Region included in survey, regarding the number of employees, the ratio of corporations having personnel count between 1-50 is % 6.2, meanwhile the ratio of corporations having personnel count between 51-250 is %37.2.

The ratio of corporations employing personnel count between 251 and 500 is %28, and between 501 and 1000. The ratio of corporations that did not answer this question is %0.9. When we look at the mean personnel count for each corporation, we find out that the number is approximately between 250 and 400.

Table 2. TQM practices in corporations

	Number	Ratio (%)
Yes	60	53.1
No	53	46.9
Total	113	100.0

As seen in Table 2, %53.1 of corporations included in survey use TQM procedures, however %46.9 of them do not.

Table 3 shows the range of reasons of not using TQM. The rate of corporations did not respond to that question is %58. The fact

that corporations who use TQM (as you can see %53 of corporations included in survey use TQM) didn't have to answer this question, the ratio of non-responding corporations resulted fairly high.

Table 3. The reasons of corporations for not using TQM

	Number	Ratio (%)
Not having enough information on TQM	18	15.9
Being costly	3	2.7
Not having the support of higher management	7	6.2
Not being a suitable form of management	18	15.9
Costly+Not suitable	1	.9
Non Responding	66	58.4
Total	113	100.0

The difficulties experienced during TQM practices in corporations included in our survey are shown in Table 4, rated by an importance degree. Corporations mentioned that

the most common experienced difficulties are poor planned production process and the lack of interest in employees.

Table 4. Importance degrees and value rates of difficulties experienced during TQM

Difficulties	Non-Responding	Difficulties rated in a importance degree					Weighted Rates	Mean
		1	2	3	4	5		
Poor planned production process	53	7	9	10	16	18	205	3.48
Indifferent management	52	20	4	10	8	19	185	3.03
Indifferent employees	52	11	5	13	14	18	206	3.38
Indifferent counselors	55	17	9	13	13	6	156	2.69
Indifferent human resources department	53	16	10	16	13	5	161	2.68
Indifferent quality department	52	22	9	12	6	12	160	2.62

Quality concept is related with every step of production process. The right thing to do is providing the quality within production, rather than checking for it afterwards. Therefore well planned production process, holds importance for TQM practices.

Given the constantly changing exterior conditions, organizations must adapt themselves and keep up with these changes, just like a living organism. Therefore static structures need to change regularly and assignments need to be reorganized. This approach is typically a systematic one (7). Systematic approach displays the interaction of functions in an organization, if working in an order, harmoniously and planned.

In the study he performed in 1998, Oraman highlights the employees' full devotion to the process as the most common difficulty experienced in TQM practices. He explains the reason of this state such as, employees showing some resistance at the beginning of the process, thinking of total quality as an extra burden, believing it will bring them extra work to do and having fear as their own mistakes could be revealed (5).

One of the most important aspects determining the human behaviors and work interest is being satisfied with the job. The dif-

ference between individuals expectations and actual reality, determines if the employee loves the job or not. Therefore the important thing is to be able to identify the difference between satisfaction and dissatisfaction of an employee.

The thought of TQM, finds necessary to evaluate work satisfaction of employees and encouraging them by rewarding their attention.

Rewarding system, improves the manner and culture about TQM. Rewarding system is an image of foundation philosophy. It improves loyalty of its employees to the assets and culture of the foundation (1).

To determine if total points of experienced difficulties during TQM process vary within the number of employees (size of corporations), we performed an ANOVA test. The results from the performed test are listed in Table 5 and we evaluated the results using the following hypothesis.

Ho: Difficulties experienced during TQM process, do not vary within the size of the corporations.

H₁: Difficulties experienced during TQM process, vary within the size of the corporations.

Table 5. Variant analysis of the difference between the level of total points in TQM process regarding size of the corporations.

	Total Squares	Sd	Mean Squares	F	Significance Level
Between	182.201	4	45.550	1.059	.386
Inside	2193.924	51	43.018		
Total	2376.125	55			

Since variant analyses resulted as $F=1.059$, $f_1=4$, $f_2=51$ since the degree of freedom using 0.05 significance level, there is no im-

$P>0.05$, *Ho* hypothesis is accepted. Therefore, regarding the size of corporations, portant difference between the mean score of

answers to the difficulties experienced during TQM process.

RESULT AND SUGGESTIONS

Holding great importance for the country's economy, considerable amount of added value created by textile and confection sector is being earned by small corporations. After the research performed in 113 corporations showing activity in the region the results are:

When we examine the personnel count employed in textile corporations included in our research, %43.4 of them employ less 250 people, %49.1 of them employ between 251-1000 people. In the region %53.1 of corporations included in research, are using TQM procedures. The most common reason for %46.5 of corporations not using TQM procedures are, not having sufficient information about TQM and finding this thought incompatible with corporation's structure.

It appears that the most common experienced difficulty during the process of TQM are; poor planned production process (205 weighted value score, 3.48 mean score), and indifference of employees (206 weighted value score, 3.38 mean score. Quality concept is related with every step of the process. The right thing to do is providing the quality within production, rather than checking for it afterwards. Therefore well planned production process, holds great importance for TQM practices. Besides, as well as developing technology and the funds, the employees also forms an important source of advantage in competition. Within process of continuous developing on the customer's account, employees should focus on the quality and that is one of the constant principles of success.

When we evaluated the difficulties experienced during TQM process, if they vary regarding the size of the corporations (number of employees), using 0.05 as significance level, we concluded that the difference is insignificant. We assumed that, since the corporations with larger employee counts would have more experts and educated personnel, the difficulties experienced during TQM process would be different than the ones experienced in small corporations. But the results of our analysis determined there is no such difference.

In conclusion, within the forming new world order, we believe that Turkish Textile and Confection Sector should empower its competing potential, by adopting a philosophy focused on better quality and customer satisfaction by highlighting the concept of

Total Quality Management.

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