# Effectiveness of teamwork in the textile-leather industry in the Republic of North Macedonia

### Učinkovitost timskog rada u tekstilno-kožarskoj industriji u Republici Sjevernoj Makedoniji

Scientific paper / Znanstveni rad

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#### Abstract

Human resources and their qualitative characteristics represent one of the key factors for the development of the textile-leather industry due to its labor-intensive nature. Human resources are the foundation of every company. There is no company today in which the team spirit is not applied in the execution of work tasks at any level. In this paper, the effectiveness of teamwork in the textile-leather industry is examined through a survey questionnaire. Team leaders - managers and workers were surveyed. The quality of teamwork, competitive advantage, human resources management, and communication between all hierarchical levels are considered as indicators of effective teamwork in this survey. After summarizing the results of the survey, a statistical analysis of the data (t-test, arithmetic mean, and standard deviation) and a comparison of the results obtained from managers and workers was made.

**Keywords:** teamwork; the quality of teamwork; human resources management; communication among team members

#### Sažetak

Ljudski resursi i njihove kvalitativne karakteristike jedan su od ključnih čimbenika razvoja tekstilnokožarske industrije zbog svoje radno intenzivne prirode. Ljudski resursi temelj su svake tvrtke. Danas ne postoji tvrtka u kojoj se timski duh ne primjenjuje u obavljanju radnih zadataka na bilo kojoj razini. U ovom se radu putem anketnog upitnika ispituje učinkovitost timskog rada u tekstilno-kožarskoj industriji. Anketirani su voditelji timova – menadžeri i radnici. U anketi se kao pokazatelji učinkovitog timskog rada uzimaju kvaliteta timskog rada, konkurentska prednost, upravljanje ljudskim resursima i komunikacija između svih hijerarhijskih razina. Nakon sumiranja rezultata ankete, napravljena je statistička obrada podataka (t-test, aritmetička sredina i standardna devijacija) i usporedba rezultata dobivenih od strane menadžera i radnika.

**Ključne riječi:** timski rad; kvaliteta timskog rada; konkurentska prednost; upravljanje ljudskim resursima; komunikacija između članova tima

#### 1. Introduction

In the Republic of North Macedonia, the textileleather industry is one of the leading processing industries in the country with significant results in the formation of GDP. Unlike other economic activities, in this area the entrepreneurial initiatives of the businessmen have come to the fore relatively more; more business connections with foreign partners have been established, which is the foundation for further development of this industry [1].

The frequent change of fashion trends and the development of the so-called "Fast Fashion" have contributed to the dominance of dynamic changes in the textile and leather industry companies that have encouraged them to decide on teamwork as a flexible organizational form in the work process [2, 3]. Within teams, the performance of work tasks is the result of joint work and, with good coordination and communication between team members, work tasks are executed with higher quality and greater productivity [4, 5]. On the other hand, teamwork is particularly suitable for companies in the textile-leather industry because here the work tasks exceed the abilities of an individual [2]. In the textile-leather industry, collective knowledge, skills, creative ideas, and experience are needed to complete work tasks effectively within a certain period of time [6].

There is a large amount of research on the effectiveness of teamwork in various industries and services. In this paper, the effectiveness of teamwork in companies from the textile-leather industry is examined through anonymous surveying. Team members from management levels - managers and workers were surveyed.

#### 2. Examination methodology

The survey was carried out on 166 respondents in companies from the textile and leather industry, of which 83 are managers and 83 are workers, which means that both categories of respondents are equal in number, where 50 % are workers in managerial positions - managers and 50 % are workers in other work position.

The effectiveness of teamwork has been assessed through several indicators, namely [7]:

- 1. Quality of teamwork.
- 2. Communication among team members.
- 3. Achieving competitive advantage through teamwork.
- 4. Management of human resources.

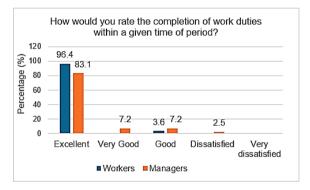
The structure of the survey questionnaire has been set so that it corresponds with the set indicators of this research. After summarizing the results of the survey, a statistical analysis of the data (t-test, arithmetic mean, and standard deviation) and a comparison of the results obtained from managers and workers was made. The statistical analysis was done in the SPSS statistical software.

#### 3. Results and discussion

The survey results are presented graphically for each examined group (managers and workers) and separately for each of the above-mentioned indicators for evaluating the effectiveness of teamwork.

#### 1. Quality of teamwork

This section shows the results of the survey questionnaire for the three questions that assess the quality of teamwork. Figure 1 shows the results, i.e. the opinions of the respondents, about the completion of work duties in a given period of time.



**Figure 1.** Managers' and workers' opinions about the completion of work duties in the team

From the display of the results in Figure 1, 96.4 % of the workers evaluate the completion of work duties in the team as excellent, and a very small percentage 3.6 % evaluate it as good. 83.1 % of the managers rated the completion of the work duties in the team as excellent, 7.2 % as very good, 7.2 % as good, and 2.5 % were not satisfied with the completion of the duties in the given time of period. Both managers and workers mostly believe that work duties in teams are being completed on time, and only a small percentage of managers believe that there are lapses in the completion of work duties.

Figure 2 shows managers' and workers' opinions about the quality of work in the team.

From Figure 2, can be seen that 68.7 % of the workers evaluate the quality of work in the team with the highest rating. A smaller percentage, 22.9 % of workers, evaluates the quality of work in

teams as very good, and 8.4 % evaluate it as good. As for managers, 50.6 % rate the quality of work in the team as excellent, 24.1 % as very good, and 25.3 % as good. We can state that both managers and workers are satisfied with the quality of work in the team, although the numbers from the survey show that managers should additionally analyze the factors that affect the quality of work and take some actions to raise quality to a higher level.



**Figure 2**. Managers' and workers' opinions about the quality of work in the team.

From the results related to the qualification of the team members in Figure 3, it can be seen that 72.3 % of workers rate the qualification of the workers in their team as excellent, 14.5 % consider that the qualification of the team members is very good, and 13.2 % consider it good.



**Figure 3.** Managers' and workers' opinions about qualification of the team members

74.7 % of managers consider that the qualification of team members is excellent, 15.7 % consider that the qualification of members is good, and 9.6 % that it is very good. According to the presented data for the highest rating, it can be seen that the results of managers and workers are almost equal. To determine the significance of the differences in the attitudes of managers and workers in relation to the first indicator "Quality of teamwork", a t-test for significance of differences was made.

**Table 1.** Significance of differences in theattitudes of workers and managers in relation tothe indicator quality of teamwork

Compared groups	N*	М*	SD*	df*	t*	р
Managers	83	4.51	0.62	164	-2.49	0.013
Workers	83	4.71	0.39			

\*N - the number of respondents; M - mean value; SD - standard deviation; df - the degrees of freedom; t - a ratio of the difference between the mean of the two sample sets; p - significance level.

The results of the t-test in Table 1 show that there is a statistically significant difference in the attitudes of managers (M = 4.51, SD = 0.62) and workers (M = 4.71, SD = 0.39) regarding the indicator quality of teamwork (t (164) = -2.49, p<0.05).

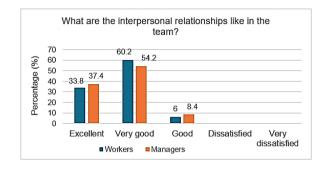
#### 2. Communication among team members

In this section, the results presented concern the three questions from the survey questionnaire, through which the communication among team members is assessed. Figure 4 shows the managers' and workers' opinions about managers' acceptance of workers' ideas.



**Figure 4.** Managers' and workers' perceptions of managers' acceptance of workers' ideas

From the values shown in Figure 4 it can be observed that 36.1 % of workers consider that managers of their teams accept their ideas very well, 31.4 % consider that managers accept their ideas very well, 30.1 % declare that their ideas are well accepted, and only 2.4 % are dissatisfied with how managers react to their ideas. As for managers, 67.5 % responded that they accept their team members' ideas very well, and 32.5 % think that managers accept the ideas of the workers in the teams very well. From the answers given, we can conclude that there are companies in which managers accept the employees' ideas regarding the performance of tasks. Otherwise, if we are already discussing this matter, it should be considered that it is not only about whether the manager wants to give employees the opportunity to highlight ideas, but also about how good the employee's idea is that would be useful for the job. Figure 5 shows the opinions of managers and workers about interpersonal relations in the team.



**Figure 5.** Managers' and workers' opinions about interpersonal relations in the team

From the graph in Figure 5, it can be seen that 33.8 % of the workers consider that interpersonal relations in their teams are excellent, 60.2 % consider them very good, and 6 % consider that they are good. As for the surveyed managers, 37.4 % consider that interpersonal relations in their teams are excellent, 54.2 % that they are very good, and 8.4% that they are good. From both groups there are no respondents who are dissatisfied with the interpersonal relations in the teams.

Figure 6 shows the opinions of managers and workers about communication among the manager/s and the workers in the team.



**Figure 6.** Managers' and workers' opinions about communication among the manager and the workers in the team

From Figure 6, it can be seen that there are different types of answers in both surveyed groups. 18.1 % of the workers think that communication between the managers and the workers in the team is excellent, the same number answered that it is very good, 20.5 % think that communication is good, 24.1 % are not satisfied with communication in the team, and 19.2 % are very dissatisfied. 24.1 % of the managers stated that communication between managers and workers in their teams is excellent, 18.1 % that it is very good, 33.7 % that it is good, 20.5 % are dissatisfied, and 3.6 % are very dissatisfied with communication in their teams. Managers should work on improving communication between themselves and workers.

That communication should not only be in formal meetings, in written form through e-mails or through formal internal documentation. They should meet more often in informal meetings where they would hear the workers' problems, they should have a friendly approach in giving directions for solving problems, and with that, communication in teams would improve as well as interpersonal relations. The manager's friendly relationship with the rest of the team members means mutual agreement on the performance of work duties, but he/she should still retain the mentoring role during work.

The results of the t-test in Table 2 show that there is a statistically significant difference between the attitudes of managers (M = 4.10, SD = 0.58) and workers (M = 3.77, SD = 0.74) regarding communication among team members (t (164)= 3.172, p<0.05).

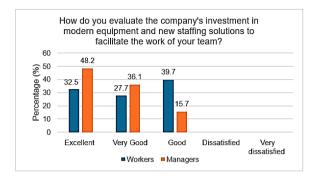
**Table 2.** Significance of differences in theattitudes of workers and managers regarding theindicator of communication among team members

Compared groups	N*	M*	SD*	df*	t*	р
Managers	83	4.10	0.58	164	3.172	0.002
Workers	83	3.77	0.74			

\*N - the number of respondents; M - mean value; SD - standard deviation; df - the degrees of freedom; t - a ratio of the difference between the mean of the two sample sets; p - significance level.

3. Achieving competitive advantage through teamwork

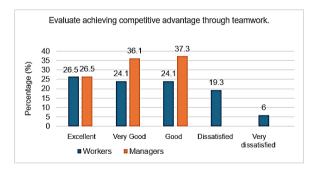
In this section, results presented concern the three questions from the survey questionnaire through which the achievement of competitive advantage through teamwork is assessed. Figure 7 presents the opinions of managers and workers about the company's investment in modern equipment and new staffing solutions that would simplify and facilitate the work in the team.



**Figure 7**. Managers' and workers' opinions about the company's investment in modern equipment and new staffing solutions

From Figure 7 it can be seen that 32.5 % of workers rate the company's investment in modern equipment and new staff as excellent, 27.7 % as very good, and 39.7 % as good. As for managers, 48.2 % rate it as excellent, 36.1 % as very good, and 15.7 % as good. In general, it can be noted that companies are investing in modern equipment and new staffing solutions, although according to the results it can be concluded that this investment should be greater because in order to succeed in the market, innovations must be applied. They contribute to a higher quality in operations and greater success of the company.

Furthermore, Figure 8 shows the opinions of managers and workers about achieving a competitive advantage through teamwork.



**Figure 8**. Managers' and workers' opinions about achieving competitive advantage through teamwork

It can be noted from the displayed values that 26.5 % of workers evaluate the achievement of a competitive advantage through teamwork as

excellent, 24.1 % evaluate it as very good and good, 19.3 % pointed out that they are dissatisfied, and 6 % that they are very dissatisfied with the attempt to achieve competitive advantage through teamwork. 26.5 % of the surveyed managers rated the achievement of competitive advantage through teamwork as excellent, 36.1 % as very good, and 37.3 % as good.

According to the views of managers, we can state that achieving competitiveness of the company through working in teams is possible, but this percentage is lower among workers. Teamwork should be a part of every successful company that strives to achieve a competitive advantage among companies from the same or similar business.

Figure 9 shows the opinions of workers and managers about the sales of products on the market. 20.5 % of the surveyed workers believe that their products sales on the market are excellant, 42.2 % that they sell very well, and 36.1 % that sales are good. 32.5 % of the managers consider that sales are excellent, 20.5 % that they are very good, 32.5 % that they are good, and 14.5 % of the managers are dissatisfied with the sales of products.



**Figure 9**. Managers' and workers' opinions about the sales of products on the market

**Table 3.** Significance of differences in theattitudes of managers and workers regarding theindicator of achieving competitive advantage

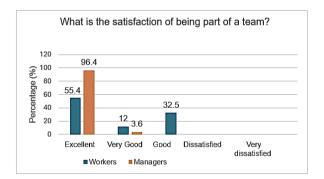
Compared groups	N*	М*	SD*	df*	t*	р
Managers	83	3.97	0.57	164	2.020	0.045
Workers	83	3.75	0.80			

\*N - the number of respondents; M - mean value; SD - standard deviation; df - the degrees of freedom; t - a ratio of the difference between the mean of the two sample sets; p - significance level.

The results of the t-test in Table 3 show that there is a statistically significant difference between the attitudes of managers (M = 3.97, SD = 0.57) and workers (M = 3.75, SD = 0.80) regarding the indicator of achieving competitive advantage through teamwork (t (164) = 2.020, p<0.05).

#### 4. Management of human resources

In this part, results are presented for the three questions from the survey questionnaire through which management of human resources is assessed. Figure 10 shows the responses about members' satisfaction with being part of the team. From the values shown, it can be noted that 55.4% of the workers declared that they feel excellent about being part of a team and consider that other members' satisfaction is excellent. 12% answered that they are very satisfied with working in a team and 32.5% answered that they feel good about working in a team. As for managers, 96.4% consider that satisfaction of team members is excellent, and only 3.6% consider it to be very good. As per this, we can conclude that the respondents are satisfied with working in a team, although higher marks were obtained from managers.



**Figure 10**. Managers' and workers' satisfaction with being part of a team

Figure 11 shows managers' and workers' opinions about the motivation of employees in the team. Of the surveyed workers, 47% believe that the members in their teams are highly motivated, 21.7% believe that they are very well motivated, and 31.3% believe that the motivation among the members in the teams is good. As for managers, 90.4% consider that they have an excellent system of motivating their team members, and 9.6% consider that the members in the teams are very well motivated. Managers have a higher opinion of the motivation system applied in their teams, and this can be seen from the values shown in Figure 11. An additional analysis is needed to find out what the reason is for the lesser pleasure of workers from motivation system, and managers to work on improving the system of workers' motivation.



**Figure 11**. Managers' and workers' opinions about the motivation of employees in the team



**Figure 12**. Managers' and workers' opinions about human resources management

Figure 12 shows the answers to the last question of the survey questionnaire - how the respondents assess the management of human resources in the team. Regarding this question, 8.4% of the workers think that the management of human resources is excellent, 65.1% think that it is very good, and 26.5% think it is good. 15.7% of the managers consider that the management of human resources in their teams is excellent and 84.5% consider it very good. Since managers from different management levels were surveyed, most likely managers from higher management levels consider human resources management to be excellent, and managers from lower levels evaluate human resources management as very good. There is also a difference in the ratings given by managers and workers on this issue. That is why we think that managers should do an internal online anonymous survey, for all team members, about the advantages and disadvantages of human resources management.

**Table 4.** Significance of differences in theattitudes of managers and workers regarding theindicator of human resources

Compared	N*	М*	SD*	df*	t*	р
groups						
Managers	83	4.67	0.18	164	7.603	0.000
Workers	83	4.06	0.70			

\*N - the number of respondents; M - mean value; SD - standard deviation; df - the degrees of freedom; t - a ratio of the difference between the mean of the two sample sets; p - significance level.

The results of the t-test presented in Table 4 show that there is a statistically significant difference between the attitudes of managers (M = 4.67, SD = 0.18) and workers (M = 4.06, SD = 0.70) regarding the indicator of human resources management (t (164) = 7.603, p<0.05).

#### 5. Conclusions

An idea was obtained from the survey about the level of quality with which the teams work in companies from the textile - leather industry, as seen from the perspective of managers and workers. We came know about interpersonal to communication and interpersonal relations existing in teamwork in companies in the textileleather industry. An assessment was made regarding the achievement of a competitive advantage among companies in this industry through teamwork and a real picture of the quality of human resources management in work teams was obtained.

The statistical analysis showed us that there is a statistically significant difference in the opinions of managers and workers from the textile-leather industry in relation to all the examined indicators of effective teamwork. In general, managers rate all indicators higher, except for the quality of teamwork indicator, where workers give a higher rating. Which means that if the communication in teams and the motivation system are improved, we predict that the workers would work with higher quality, and menagers' assessment of the quality of teamwork will increase. Therefore, we suggest that the menagers from higher management levels should do an anonymous survey for all teams members, about the the advantages and disadvantages of communication and human resources management.

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