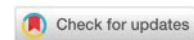# RESEARCH ON THE QUALITY OF WORK LIFE AND EMPLOYEE MOTIVATION IN IT COMPANY

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Abstract: The quality of work life and motivation are essential for the success of companies. Research into these topics provides insights for improving the conditions and motivation of workers. The aim of this paper is to investigate the factors that most influence the quality of work life and motivation within a team of an IT company, to determine whether there are significant differences in the perception of the quality of work life and motivation among different groups of employees and how the working conditions and motivation of employees can be improved. The research sample was purposive sampling, employees in an IT company in the Republic of Serbia (n = 70). The research results show that investing in modern infrastructure, support for career development and continuous learning, as well as providing a mentorship program, can be key factors in achieving a successful work environment that stimulates and satisfies employees.
Keywords: quality of work life, employee motivation, IT company, work environment, employee satisfaction
Field: Social Sciences

1. INTRODUCTION

The quality of work life and employee motivation are key factors influencing the success and productivity of an organisation (Ali & Anwar, 2021). An increasing number of studies (Bellmann & Hübler, 2020; Dhamija, Gupta, & Bag, 2019; Leitão, Pereira & Gonçalves, 2019) are focusing on these topics, recognising their importance for employee satisfaction and the efficiency of work processes. This paper investigates the relationship between the quality of work life and employee motivation in one of many teams in an IT company operating in the Republic of Serbia. The company where the research was conducted is primarily involved in information technology and programming tasks, but also provides and plans optical networks. This work focused on the team working on the implementation of optical networks. This team is a key link in the successful realisation of the project, and its efficiency and employee engagement play a crucial role in achieving the set goals.

To better understand the factors influencing the quality of work life and employee motivation in this team, research was conducted covering various aspects and characteristics of the respondents. Respondents were divided into groups based on different criteria, including age, professional qualification, level of education, gender, work experience in the company, and the position they hold. Studying different groups of respondents has made it possible to identify specific factors that can influence the quality of work life and employee motivation. This can better understand the individual needs and preferences of employees, and provide relevant recommendations for improving working conditions and motivation. The aim of this paper is to investigate, using an IT company as an example, the factors that contribute most to the quality of work life and motivation in a team, to identify whether there are significant differences in the perception of the quality of work life and motivation among different groups of employees, and to consider ways to improve working conditions and employee motivation.

2. WORKING CONDITIONS IN IT COMPANIES

The working conditions in the IT sector, especially when it comes to workspace, should be designed to support productivity, creativity, and employee wellbeing. Ergonomics of the workspace is essential for better job performance in companies (Afroz & Haque, 2021). It is also important to provide employees with rest areas, such as kitchens, coffee zones, or even game rooms. These spaces can help employees

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relax and rest during breaks, and can also encourage socialization and teamwork (Tremblay & Scaillerez, 2019). Adequate lighting, especially natural light, can improve productivity and reduce eye fatigue. Temperature control is also important, as too cold or too hot an environment can be uncomfortable and can disrupt employee concentration (Karoso et al., 2022).

In the IT sector, where concentration is key, silence and noise control are essential. Quiet workspaces, or even providing noise-cancelling headphones, can be useful (Acun & Yilmazer, 2018). Flexibility is another key aspect of workspace in the IT sector. Many IT companies provide flexible workspaces that can include open offices, private offices, meeting rooms, and quiet work rooms. Flexibility can also include the possibility of remote work. Workplace safety is also important, including the physical safety of employees, as well as data and information security (Dang-Pham, Pittayachawan & Bruno, 2017). All these items together contribute to creating a work environment that supports productivity, creativity, and employee wellbeing. Hygiene in companies is of paramount importance, not only for maintaining a healthy working environment, but also for improving productivity and employee satisfaction. Good ventilation is also an important aspect of hygiene in IT companies. Social support and opportunities for advancement are key aspects of working conditions in companies, which can significantly impact employee satisfaction, motivation, and productivity (Basalamah, & As'ad, 2021).

Employee wellbeing programmes can include various initiatives, such as flexible working hours, mental health programmes, physical health programmes such as gym or yoga, as well as team-building events (Chung & Van der Lippe, 2020). Opportunities for advancement are also key to employee motivation and satisfaction (Parsons, & Broadbridge, 2006; Asaari, Desa & Subramaniam, 2019). The trend of working remotely has been gaining traction over recent years. However, in 2020, the unexpected onset of a worldwide pandemic forced even those companies that were sceptical of remote work to adopt this mode of operation (Radulović et al., 2022). To progress in IT firms, employees must keep up with new technologies. IT leaders might consider introducing e-learning (Deretić et al., 2019). All these initiatives can contribute to creating a positive and supportive work environment, where employees feel valued and motivated to give their best. The IT company in which the research was conducted recognises the importance of providing adequate working conditions and caring for the wellbeing of its employees in order to achieve high standards of quality of working life.

3. RESEARCH METHODOLOGY

The primary research was created to examine the attitudes and opinions of respondents about the quality of working life and employee motivation within the team of one IT company. The following research questions were set:

Q1: Are there significant differences in the perception of the quality of working life and motivation among different groups of employees?

Q2: What are the key factors that most influence the quality of working life and motivation in the team?

Q3: How and in what way can working conditions and employee motivation be improved?

Data were collected by direct survey method, and participation in the survey was on a voluntary basis. The research sample was purposive sampling of employees in a private IT company. The pilot study included 10 respondents, while the final number of respondents was 70 (n = 70). The research was conducted during May 2023. The questionnaire consisted of two parts. The first part included questions about gender, age, level of education, work experience and current position in the company. In the second part, respondents rated the work environment, educational and social benefits, provided time for knowledge acquisition, support for improvement, and opportunities for advancement on a scale (1-very dissatisfied, 7-very satisfied). To answer the research questions, measures of central tendency, measures of dispersion, and measures of symmetry were calculated. Non-parametric techniques (Chi-square Test, Mann-Whitney U test, Kruskal-Wallis test) were used to test hypotheses. The data were processed using the SPSS software package.

4. RESULTS

The research results are based on the "Quality of Working Life and Employee Motivation Survey". As previously stated, the research involved 70 respondents who are employed in an IT company, of which 43 (61.4%) are men and 27 (38.6%) are women. From Table 1, it can be seen that the largest percentage of respondents belong to the age group of 25 to 34 years (28.6%), and that the most common level of

education is College or university degree with 42.9%. In terms of work experience in the company in question, most employees stated that they have been working from 6 months to 1 year (35.7%). As for the position in the company, half of the employees (50%) work as project designers (for more details see Table 1). This data about the respondents allows for a detailed analysis and comparison of different groups in order to assess their quality of working life and motivation.

The Chi-square test of independence did not show a significant relationship between the level of education and gender of respondents, χ^2(df = 2, n = 70) = 1.797, p = 0.407, position and gender of respondents, χ^2(df = 3, n = 70) = 3.346, p = 0.341 nor between work experience and gender of respondents, χ^2(df = 3, n = 70) = 6.932, p = 0.074. A slightly higher percentage of female respondents (66.7%) have a college or university degree or a Master of Science degree compared to 62.8% of male respondents. Satisfaction with individual factors in the workspace is shown in Table 2.

Table 1. Socio-demographic structure of sample of employees (sample size 70)

		Frequency	Percent (%)			Frequency	Percent (%)
Gender	Male	43	61.4	Age group	18-24	10	14.3
	Female	27	38.6		25-34	20	28.6
Level of Education	High School degree	25	35.7		35-44	15	21.4
	College or university degree	30	42.9		45-54	15	21.4
	Master of Science degree	15	21.4		55 and older	10	14.3
Experience of working in a company	< 6 months	15	21.4	Position in the company	Manager	10	14.3
	6 months – 1 year	25	35.7		Document specialist	20	28.6
	1 year – 2 years	20	28.6		Project designer	35	50.0
	> 2 years	10	14.3		Direct manager	5	7.1

The hygiene of the entire workspace is rated as excellent by the majority of employees (Mean= 6.63; Me = 7; Mo = 7; StDev = 0.52). Maintaining a high level of hygiene creates a healthy and pleasant working environment, which is key to employee satisfaction. Employees expressed satisfaction with modern and well-equipped offices (Mean = 6.44; Me = 7; Mo = 7; StDev = 0.63). In addition, employees gave high ratings to kitchens on every floor of the company, which offer free beverages and healthy meals (Mean = 6.10; Me = 6; Mo = 7; StDev = 0.84). This convenience provides employees with the opportunity to relax during breaks and replenish their energy. Employees expressed a slightly lower degree of satisfaction with the quality of equipment provided to them for work (Mean = 5.94; Me = 6; Mo = 6; StDev = 0.72). The air conditioning of the offices was also rated positively, but with the lowest average score (Mean = 5.47; Me = 5; Mo = 5; StDev = 0.76). Maintaining an optimal temperature allows employees to focus on work without being disturbed by uncomfortable conditions (for more details, see Table 2).

Table 2. Descriptive measures of satisfaction with individual factors in the workspace

Factor of workspace	Mean	*StDev*	CV (%)	*Me*	*Mo*	Skewness
Hygiene	6.63	0.52	7.84	7	7	-0.868
Modern offices	6.44	0.63	9.78	7	7	-0.679
Kitchens	6.10	0.84	13.77	6	7	-0.193
Quality of equipment	5.94	0.72	12.12	6	6	0.086
Air conditioning	5.47	0.76	13.89	5	5	0.617

The Mann-Whitney U test revealed a statistically significant difference in workspace satisfaction in relation to gender, specifically for men (Me = 6.0; n = 43) and women (Me = 6.0; n = 27), U = 244.500, Z = -4.382, p < 0.001.

Women are more satisfied with the workspace in the IT company (Mean = 6.37; StDev = 0.74; CV = 11.64%; Me = 6; Mo = 7; Skewness = -1.35) compared to men (Mean = 5.58; StDev = 0.63; CV = 11.22%; Me = 6; Mo = 6; Skewness = -0.02). The reasons could be associated with specific needs and preferences they have in the working environment. Women particularly value workspaces that are safe, clean, and have comfortable rest areas. As the company pays attention to such details, it contributes

to greater satisfaction of women with the workspace. The Kruskal Wallis Test revealed a statistically significant difference in workspace satisfaction for five age groups of respondents (Group 1, n = 10: 18-24; Group 2, n = 20: 25-34; Group 3, n = 15: 35-44; Group 4, n = 15: 45-54; Group 5, n = 10: 55 and over), $\chi2(4, n = 70) = 22.839, p < 0.001$.

Younger employees (under 25 years) in the IT company are more satisfied with the workspace compared to older employees. As they are in the early stages of their careers, younger employees often have less work experience, and their expectations regarding the workspace may not be as high, compared to more experienced colleagues who may have worked in different environments. There is a noticeable trend of decreasing workspace satisfaction among older employees, as each subsequent age group had less satisfaction than the previous group (for more details, see Table 3).

Table 3. Age-related satisfaction metrics for workplace factors

Age group	*n*	*Mean*	*Me*	*StDev*	Skewness
18-24	10	6.80	7	0.42	-1.779
25-34	20	6.50	7	0.69	-1.076
35-44	15	5.87	6	0.74	0.227
45-54	15	5.80	6	0.68	0.256
55 and older	10	5.60	6	0.52	-0.484

The Kruskal Wallis Test revealed a statistically significant difference in workspace satisfaction for three groups of respondents depending on their education (Group 1, n = 25: High School degree; Group 2, n = 30: College or university degree; Group 3, n = 15: Master of Science Degree), $\chi2(2, n = 70) = 9.820, p = 0.007$. Workspace satisfaction in IT companies can be associated with employees' educational attainment. Employees with lower qualifications work in technical support or administrative jobs and are focused on the efficiency and practicality of the workspace. Employees with a higher degree of education (college degree and master's) often seek workspaces that encourage innovation, research, and deeper analysis. They may value workspaces that provide them with access to advanced tools and technologies, as well as quieter rooms for focused work (for more details, see Table 4).

Table 4. Educational level-based satisfaction metrics for workplace factors

Level of Education	*n*	*Mean*	*Me*	*StDev*	Skewness
High School degree	25	6.16	6	0.55	0.097
College or university degree	30	5.77	6	0.73	-0.178
Master of Science degree	15	6.40	6	0.51	0.455

The company has achieved notable employee satisfaction regarding professional development and learning, with different aspects receiving high scores (average scores are above 6, for more details, see Table 5).

Support for advancement received the highest average score (Mean = 6.66; StDev = 0.54; CV = 8.11%), i.e., respondents expressed satisfaction with the support the company provides for advancement and attending professional and language courses. The opportunity for advancement is in second place (Mean = 6.44; StDev = 0.58; CV = 9.01%). Satisfaction with the time provided for acquiring knowledge and mastering new technologies or processes was rated with a mean of 6.30, standard deviation of 0.67, and a coefficient of variation of 10.63%. Mentorship was also recognized as a valuable resource, with a mean of 6.16, standard deviation of 0.74, and a coefficient of variation of 12.01%. Overall, the company has managed to create an environment that favours learning, development, and support, which is recognized through high percentages of satisfaction among employees.

Table 5. Satisfaction metrics for educational and social benefits

Benefits	*Mean*	*StDev*	CV (%)	*Me*	*Mo*	Skewness
Mentorship	6.16	0.74	12.01	6	6	-0.257
Time provided for acquiring knowledge	6.30	0.67	10.63	6	6	-0.428
Opportunity for advancement	6.44	0.58	9.01	6	7	-0.457
Support for advancement	6.66	0.54	8.11	7	7	-1.249

The Kruskal Wallis Test revealed a statistically significant difference in the satisfaction with the time provided for learning across five age groups of respondents (Group 1, n = 10: 18-24; Group 2, n = 20: 25-34; Group 3, n = 15: 35-44; Group 4, n = 15: 45-54; Group 5, n = 10: 55 and older), χ2(4, n = 70) = 23.181, p < 0.001. Younger employees (under 25 years of age) might be more satisfied with the time provided for learning than the older ones (Mean = 6.80; StDev = 0.42; CV = 6.18%). Having grown up with technology, younger generations are generally already familiar with digital tools and platforms used for learning (for more details, see Table 6).

Table 6. Age-related satisfaction metrics for knowledge acquisition time

Benefits	*Mean*	*StDev*	CV (%)	*Me*	*Mo*	Skewness
Mentorship	6.16	0.74	12.01	6	6	-0.257
Time provided for acquiring knowledge	6.30	0.67	10.63	6	6	-0.428
Opportunity for advancement	6.44	0.58	9.01	6	7	-0.457
Support for advancement	6.66	0.54	8.11	7	7	-1.249

The Kruskal Wallis Test revealed a statistically significant difference in the satisfaction with the time provided for learning across four groups of respondents in terms of their work experience in the company (Group 1, n = 15: less than 6 months; Group 2, n = 25: from 6 months to 1 year; Group 3, n = 20: from 1 year to 2 years; Group 4, n =10: more than 2 years), χ2(3, n = 70) = 10.684, p = 0.014. People who have been working in the company longer may be more satisfied with the support for improvement, as according to the research, the lowest average score was given by employees with up to 6 months of work experience (Mean = 5.73; StDev = 0.70; CV = 12.22%). Employees who have been in the company longer are more familiar with the internal resources and opportunities for improvement that the company offers. On the other hand, employees with longer tenure in the company have established relationships with colleagues and superiors. These relationships can enable better communication about learning opportunities and provide stronger support in the learning process (for more details, see Table 7).

Table 7. Satisfaction metrics for training support based on company tenure

Work experience in the company	*n*	*Mean*	*Me*	*StDev*	Skewness
< 6 months	15	5.73	6	0.70	0.433
6 months – 1 year	25	6.16	6	0.75	-0.274
1 year – 2 years	20	6.55	7	0.61	-1.003
> 2 years	10	6.30	6	0.68	-0.434

The Kruskal Wallis Test revealed a statistically significant difference in the satisfaction with the opportunity for advancement across four groups of respondents in terms of their position within the company (Group 1, n =10: Manager; Group 2, n = 20: Document specialist; Group 3, n =35: Project designer; Group 4, n = 5: Direct manager), χ2(3, n = 70) = 8.132, p = 0.043. Managers in the IT company are more satisfied with the opportunities for advancement in relation to the position within the company compared to direct managers, project designers and document specialists (Mean = 5.60; StDev = 0.52; CV = 9.29%). Direct managers are the closest to employees in terms of hierarchy and are often responsible for daily tasks, providing feedback, setting goals, and evaluating the performance of employees who are directly subordinate to them, and they showed the least satisfaction with the opportunities for advancement (for more details, see Table 8).

Table 8. Satisfaction metrics for advancement opportunities based on company position

Position in the company	*n*	*Mean*	*Me*	*StDev*	Skewness
Manager	10	5.60	6	0.52	-0.484
Document specialist	20	5.25	5	0.72	-0.418
Project designer	35	5.49	6	0.78	-0.736
Direct manager	5	4.60	5	0.55	-0.609

To improve working conditions and employee motivation in the IT sector, it's crucial that companies recognize and address the specific needs of their employees. Finally, promoting a work-life balance can be crucial for maintaining employee motivation and satisfaction. This can include providing support for employees to better balance their work and personal responsibilities, such as flexible working hours,

support for parents, or stress reduction programs. All these strategies together can contribute to creating a quality work life that can enhance employee motivation in IT teams.

5. CONCLUSIONS

The results of this research show that the quality of working life in the company is high, which is reflected through the hygiene of the space (Mean = 6.63; StDev = 0.52), modern offices (Mean = 6.44; StDev = 0.63), and the presence of kitchens (Mean = 6.10; StDev = 0.84). Lower scores were given to the quality of work equipment (Mean= 5.94; StDev = 0.72) and air conditioning of the space (Mean = 5.47; StDev = 0.76).

The research showed that women are more satisfied with the workspace in the IT company (Mean = 6.37; StDev = 0.74) compared to men (Mean = 5.58; StDev = 0.63). In terms of satisfaction with individual factors in the workspace depending on the age group, younger employees (18-24 years) in the IT company are most satisfied with the workspace (Mean = 6.80; StDev = 0.42), with each subsequent age group giving lower scores. Employees with the highest level of education (Master of Science degree) are most satisfied with the quality of the workspace (Mean = 6.40; StDev = 0.51).

Educational and social benefits in the IT company (mentorship, time for knowledge acquisition, opportunity for advancement and improvement) were rated with high average scores (mean range from 6.16 to 6.66). If we specifically analyse the time for knowledge acquisition, younger employees (18-24 years) are most satisfied precisely because of easier adaptation to changes and the ability to acquire new knowledge faster (Mean = 6.80; StDev = 0.42), but there is a dependency on the length of work experience in the company because people who have spent more than a year in the company are more satisfied with the support for improvement (1 year - 2 years: Mean = 6.55; StDev = 0.61; > 2 years: Mean = 6.30; StDev = 0.68).

Of all the positions mentioned in the IT company team, managers in the IT company are most satisfied with the opportunities for advancement within the company compared to direct managers, project designers and document specialists (Mean = 5.60; StDev = 0.52).

The research results clearly indicate the success of practices and initiatives implemented in the subject company to improve the quality of working life and employee motivation. These factors have a direct impact on productivity, engagement, and overall company success. Creating a positive work environment that supports career development, providing opportunities for improvement, and supporting employees in acquiring new skills are key elements for maintaining motivation and productivity. In light of these findings, it is recommended that other companies consider implementing similar strategies and practices to improve the quality of working life and motivation of their employees. Investing in modern infrastructure, support for career development and continuous learning, as well as providing a mentoring program, can be key factors in achieving a successful work environment that stimulates and satisfies employees.

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