

REVIEW

by **Prof. Dr. Anastasia Milanova Bankova**,

member of a Scientific jury for defense of dissertation (Order of the Rector of Sofia University “St. Kl. Ohridski” RD- No. 38-294/16.06.2022)

on the topic: **“Factors influencing employee satisfaction in the ICT sector”**
for awarding the educational and scientific degree **"Doctor"** in scientific field
3.7. Administration and management

to **Irina Petkova Yanchovska**, PhD student at the Faculty of Economics and Business Administration, Sofia University “St. Kl. Ohridski”

(the defense will take place on 13-th of September 2022)

I. Overall assessment of the applicant.

I know Irina Yanchovska as a PhD student at the Department of Business Management at Faculty of Economics and Business Administration, Sofia University “St. Kl. Ohridski”. She makes an impression with her intelligence, creativity, being well organised, and a desire for development.

II. Evaluation of the dissertation work.

a. Technical characteristics of the work.

The thesis presented on the topic "Factors influencing employee satisfaction in the ICT sector" was developed on 192 pages – about 270 standard typewriter pages, 163 pages of basic text, 19 pages of appendix and 10 pages of bibliography. Structurally, the thesis contains an introduction (it presents in details the actuality of the topic, the state of the existing and missing studies, the purpose of work, research tasks), two chapters, the first dedicated to the overview of the theories underlying the study, a detailed overview of empirical studies conducted that build on a variety of theoretical models, examine them or deal with the specifics of the work satisfaction of employees in different spheres

of public life, presents the approach of the study in the dissertation. The second chapter presents the own study of the author in the ICT sector. The work ends with a discussion on the results and a conclusion. The work is illustrated by 6 figures and 27 tables. The list of information sources contains 11 titles – in Bulgarian, 185 – in English, one in Polish, a total of 197 titles.

The number of publications is sufficient and presents to the necessary extent the PhD student's work on the dissertation to the scientific public – 3 publications and 3 conference reports.

The 42-page summary correctly reflects the content of the work, includes an assessment of its contributions, presents a list of author's publications on the subject.

Based on the documents submitted it is obviously that Irina Yanchovska has fulfilled the requirements of the doctoral program and the state requirements for the doctor's degree (LDASRB (Low on the Development of the Academic Staff in RB) for the scientific field "Social, Economic and Legal Sciences", professional direction 3.7. "Administration and Management").

The technical characteristics of the dissertation make it possible to assess that the work fully meets the formal requirements for such work.

Regarding the content of the dissertation work, the following assessment can be given:

b. Actuality of the topic.

Work employee satisfaction is an important issue related to the success of organizations. It is considered as a consequence of numerous factors inside and outside the organization, it can be controlled and regulated by the organization or due to characteristics of the employee himself, it can be perceived by him in a specific way. Since "objective" and "subjective", general and specific are intertwined, in practice, many specific studies are needed to help the leaders of an industry or organization to address the topic. Typically, these studies are based on different theoretical models.

In the relatively young sector ICT research is only taking place in a newer time. Of interest is to understand the influence of a variety of factors on the behaviour of young, well-educated employees, which differ significantly from previous generations.

In this sense, this is an "eternal" topic that will require an update of knowledge. The fact that there is a lot of research does not make the task any easier because of the new challenges.

b. Clarity of objectives and assumptions.

The author poses two main research questions:

"What are the factors that ICT employees identify as most important for their personal satisfaction?"

and

"How do different factors affect the overall job satisfaction of ICT employees?"

The main objectives of the dissertation work are: identification of the factors that ICT employees consider as the most important determinants for their overall (commen) job satisfaction; survey of the level of satisfaction among ICT employees – global and general; examining the impact of individual factors on employee satisfaction; a survey of the manifestation of satisfaction among different sociodemographic groups.

Objectives and research tasks are clearly formulated.

c. Assessment of the structure of the dissertation work.

The presented work has a clear, traditional dissertation structure.

d. Evaluation of the dissertation work.

Chapter One of the dissertation is an overview of the theoretical and empirical studies published on the subject. In the beginning, a brief overview of the theoretical basics of the problem of "work satisfaction of the employees" in an organization is made.

The next part dedicated to empirical research is fully and multilaterally developed. It is extremely useful and highlights the author's deep attitude to the problem.

A very good impression makes that the author presents the types of scales used in assessing the work satisfaction of the organizations employees.

The author then returns to the detailed analysis of the factors that are usually associated with the experience of employee satisfaction.

Based on what is presented in the chapter, the author draws her model from factors influencing satisfaction. She outlines her future interests in the survey in terms of global and general employee satisfaction, the impact of individual factors on satisfaction and the influence of the sociodemographic group on results. Finally, the author specifies the hypotheses, which she will examine in the ICT sector.

Chapter two presents in details the design and methodology, analysis and results of two author's studies of the factors that affect employee satisfaction in the ICT sector.

The first study is preparatory, and the second is the actual. The author presents in detail the preparatory study, on the basis of which she specifies her model of study. This first study serves to check which factors the ICT sector employees find most important for their satisfaction. In the first survey, which contained 20 special and two demographic questions, 451 surveyed persons took part.

The author then presents in detail the main (actual) study. In addition to the improved questionnaire, she exhaustively focuses on the methodology of the study, in which she consistently applies various statistical methods to draw her conclusions. Here the work is distinguished by exceptional depth. The second study examined in detail the 10 factors identified as most significant among ICT employees who took part in the first study. In the second survey, which consisted

of 45 specialized and 11 demographic questions, 755 participants from Bulgaria and other countries took part.

The data analysis was performed using IBM SPSS Statistics and MS Excel. Several different types of analyses were carried out in the course of the study: one-dimensional measurements for primary analysis and review of mean values, factor analysis to determine individual influence factors, Cronbach's alpha assessment to check the reliability and internal consistence of the elements included in the different scales used, tables with two variables and Kruskal-Wallis H test for variation analysis and comparison of satisfaction levels among different sociodemographic groups, correlation analysis to study the links between different variables in the research model (dependent and independent dimensions) and multiple linear regression to study the impact of individual factors on overall (common) employee satisfaction.

I am particularly very satisfied with the use of the factor analysis method. In the social sphere, many factors and characteristics of the objects studied are not obvious. They could not be named (especially in advance), or would have been named speculatively without the relevant study. On the basis of the proximity of the answers to questions, groups are formed, which are supposed to manifest such not obvious factor. It will be named by the researcher. The dissertation proceeds from a preliminary orientation to factors (based on existing studies and the author's model), subsequently they can be specified on the basis of the factor analysis that has been done. Of course, in this case, the preliminary orientation of the questions somewhat influences the outcome (checks the model), but as evidenced by the given study, the use of the method can be beneficial and lead to certain improvements in the initial list of factors.

From my numerous PhD students, I managed to convince one of them to use the method. That is why its intelligent application in this case pleases me and this is a progress in our PhD research, which needs to be encouraged, because the method is very useful for social studies.

The overall construction of the methodology and the use of different statistical methods for assessment of hypotheses is interesting and excellently executed. It should be noted that it is also very well represented in the dissertation – arguments for use, results, conclusions. I hope that after this work other PhD students and young researchers at the department will diversify and enrich the statistical methods they use.

The work presented is useful and innovative in many ways – from meaningful conclusions about the factors that influence the work satisfaction of the employees in the ICT sector and which are significant – knowledge that is useful to its leaders, to offering an interesting research toolkit that can be the basis of follow-up research.

e. Assessment of the contributing nature of the dissertation.

I accept the author's summary as objectively reflecting the content of the dissertation. I accept the contributions formulated by the author in the text of the dissertation and the summary, namely:

- A systematic review of a large number of studies on the work satisfaction of the employees of the organizations has been carried out, on whose basis an author's model of factors influencing the satisfaction was extracted.
- Tools have been created to evaluate the factors influencing the work satisfaction of employees in an organization, which can also be used in future surveys.
- A survey of employee satisfaction in the ICT industry was conducted on the basis of two author's surveys that tracked in detail the factors, studied relationships and influences.
- The most important factors of satisfaction among ICT sector employees have been identified and the impact of each on overall employee satisfaction has been examined, 'general' and 'global' job satisfaction has also been established.

- A number of differences in the level of satisfaction are outlined depending on the socio-demographic characteristics of the surveyed persons.

f. Critical notes and recommendations.

The dissertation is excellent and I will only make recommendations for future work.

When analyzing the results, the author was surprised that the "independence" factor, despite the assumption, did not receive the expected evaluation. That's not weird at all. When compiling a questionnaire, we struggle with the need on the one hand to make sure that the interviewees understand roughly the same behind the words (which requires a more detailed description and explanation) and the need on the other hand for brevity – in order to hold their attention and attract them to participate in the survey. In general, it is obvious that some find that teamwork is more valuable and independence is not possible, while others take the specifics of the modern workforce more strongly and value autonomy in their workplace. Usually the answer shows what the respondent thinks is good and desirable (according to his culture). The author herself describes similar problems in the study. An interesting view on the problem has a colleague (Prof. Christian Scholz) from the University of Saarbrücken. He had developed a model of the behaviour of the modern generation (within the framework of what he called a darveconomy), which was based on the description of the movement of a bird herto (such descriptions exist in biology), each collaborator strives for his own independent space and at the same time very strongly perceives the aspiration of belonging to the herto (due to different motives and values) and movement with it (which is subject to its turn and rules). How to call this factor? I think this factor should be examined more carefully in the future. It's very interesting. It unites in one the pursuit of independence and the pursuit of belonging in a community and subordination to its order and rules.

Interesting is the conclusion of the author that in our country the "leadership" factor comes first (further – second) against only a seventh in other countries. I must point out that research by my graduates in the big companies of the sector showed one and the same thing (which to me was a surprise) – they rated their leaders as authoritarian, intrigued, arrogant and unsupportive, not contributing to a good social climate and better results of general work. In doing so, they compared them to the foreign leaders they work with and noted the radically different style of their work. In other words, these Bulgarian leaders, despite the fact that they had studied abroad, that they had undergone trainings of the company, had the example of their foreign colleagues (with whom they probably behaved appropriately), failed to realize and change their primary nature in terms of their Bulgarian collaborators. Since these were master's thesis, I did not pay much attention to this fact, although I noticed it. Moreover, different colleagues published studies with "correct" conclusions – our leaders had adopted a new style of cooperation in their work. However, this dissertation convinces me that there is probably a problem here that needs further illumination and which is especially important for the sector in Bulgaria.

And finally, a technical remark. It is not permissible to use two numberings in one work, "2. Chapter One." etc.

IV. Conclusion.

Based on the scientific contributions of the presented work, which I highly appreciate, I appreciate the capabilities of its author as a researcher too and recommend with **conviction** the award of **Irina Petkova Janchovska** the educational and scientific degree **doctor**.

Reviewer:.....

(Prof. Dr. Anastasia Bunkova)

Date: July, the 20-th, 2022, Sofia

