

OPINION

ON A THESIS SUBMITTED FOR ACQUISITION OF THE EDUCATIONAL
AND SCIENTIFIC DEGREE OF DOCTOR IN THE FIELD 3.8
„ECONOMICS“ DOCTORAL PROGRAMME „ECONOMICS AND
MANAGEMENT (INDUSTRY)“ AT THE D. A. TSENOV ACADEMY OF
ECONOMICS, SVISHTOV

Reviewer: *Prof. Aneta Deneva, Ph.D.,*
D. A. Tsenov Academy of Economics,
Svishtov

Author of dissertation work: *Emre Zafer Guney*

Topic of the dissertation: *ALGORITHMS TO FORECAST WORKFORCE*

Opinion submission grounds *No 406/30.06.2021 of the Rector of D.*
A. Tsenov Academy of Economics,
Svishtov for participation in
dissertation defense panel

I. General presentation of dissertation work

1. The development has a volume of 232 pages, of which 177 pages of main text and 27 pages of appendices.
2. The exhibition is includes 19 figures and 102 tables.
3. The dissertation is consists of an introduction, four chapters, conclusion, contributions, references and applications.
4. For the writing of the dissertation the PhD student has indicated 114 sources.
5. The appendices include 6 certificates and 91 tables.
6. The subject and the object of the study are correctly defined.
7. The development is structured correctly. The traditional approach has been used - first are considered the theoretical foundations of the problem and various

models and techniques for forecasting workforce. In the second chapter are described the specificities of the commercial sector and an analysis of the Top 10 World Trade Companies, the Turkish commercial sector was analyzed and the place of the research company - Migros was outlined in it. Chapter three describes the methodology of the study and on the basis of the collected and processed empirical material have been developed algorithms for forecasting the workforce in the various departments of the company. The fourth chapter presents a comprehensive model for labor force planning through the IBM CLEX optimization tool. On this basis, algorithms for forecasting the workforce in three departments of the company are also available.

8. The conclusions are formulated at the end of the chapters.

II. Assessment of the form and content of the dissertation

1. Selected problems are up to date and relatively new to business practice. The workforce is one of the main assets of each organization. Its maintenance costs make up a large part of production costs. Their optimization is directly related to optimal planning and forecasting staff. Practice clearly evidences that achieving the best configuration for the workforce (time, search and price) can provide an incredibly competitive advantage.
2. In world theory and practice, analyzed issues is subject to research by a number of economists and experts.
3. The exhibition is smooth. The introduced terms are directly related to the analyzed issues. A set of approaches and methods is used to carry out the research. The known research methods are applied such as: retrospective analysis, inductive and deductive method, statistical method, linear programming, etc.
4. The introduced restrictions correspond directly to the research thesis and support its implementation.
5. The executive summary consists of 48 pages and in synthesized form reflects the main parts of the dissertation work.

III. Scientific and scientific-applied contributions of the dissertation work

I accept the contributions of the dissertation work indicated in the Reference to the main contributions in the dissertation. The most important among them are the developed author methodology and algorithm for forecasting the workforce.

IV. Questions and recommendations to the dissertation work

My question to PhD student Emre Guney is there a possibility that the proposed algorithm could be applied in other industries?

V. Summarized conclusion and opinion

My opinion is positive.

The dissertation presented by Emre Zafer Guney, PhD student in the Department of Industrial Business and Entrepreneurship at the D. A. Tsenov Academy of Economics, Svishtov on the topic "ALGORITHMS TO FORECAST WORKFORCE" is a complete, completed and well-conducted scientific study on an up-to-date and relevant problem for business practice. It meets the current requirements of the Law for Development of the Academic Staff of the Republic of Bulgaria and the Regulations for Development of the Academic Staff of the D. A. Tsenov Academy of Economics.

This gives me grounds for a definite positive assessment and I strongly recommend to the honorable Scientific Jury to award PhD student Emre Zafer Guney the educational and scientific degree "Doctor" under the Doctoral Program "Economics and Management (Industry)".

30.07. 2021
Svishtov

Reviewer:
/Prof. Aneta Deneva, Ph.D./