SCIENTIFIC ADVISOR'S REFERENCE

Program:	Master in Business Analytics and Big Data - MiBA
Students:	Panchenko Anastasiia, Semenova Anna, Sivash Elizaveta
Title of thesis:	FUEL DELIVERY NETWORK OPTIMIZATION FOR GAZPROM NEFT COMPANY

Justification of the topic choice. Accuracy in defining the aim and objectives of the thesis. Justification of the topic choice; accuracy in defining the aim and tasks of the thesis; originality of the topic and the extent to which it was covered; alignment of the thesis' topic, aim and objectives.

The thesis research topic was provided by Gazprom Neft Company. Solving the problem of reducing expenses in the fuel distribution network is an urgent logistic problem for uninterrupted fuel supply from oil bases to petrol stations. The students were given the task of creating a predictive model under given restrictions on the conditions of fuel distribution. The good understanding of the goals and objectives of the thesis by students has been expressed in the completeness of the topic's disclosure.

Structure and logic of the text flow. Logic of research; full scope of the thesis; alignment of thesis' structural parts, i.e. theoretical and empirical parts.

The structure of the thesis is logical and reflects the theoretical and applied research of the authors.

Quality of analytical approach and quality of offered solution to the research objectives. Adequacy of objectives coverage; ability to formulate and convey the research problem; ability to offer options for its solution; application of the latest trends in relevant research are for the set objectives.

In the study, a deep review of the literature was conducted, methods for solving transport problems were considered. The students developed a mathematical model and conducted a detailed analysis of the tools for implementing a computer model. All stages of the development of the thesis project are justified by the conducted research. The results of data processing are visualized. The thesis contains discussions of the results and recommendations for their use.

Quality of data gathering and description. Quality of selecting research tools and methods; data validity adequacy; adequacy of used data for chosen research tools and methods; completeness and relevance of the list of references.

The dataset used in this thesis was provided by Gazprom Neft company. Quality of selecting research tools and methods is good. The thesis authors demonstrate adequacy of used data for chosen research tools and methods. The list of reference is complete and relevant.

Scientific aspect of the thesis. Independent scientific thinking in solving the set problem/objectives; the extent to which the student contributed to selecting and justifying the research model (conceptual and/or quantitative), developing methodology/approach to set objectives.

The authors demonstrated independent scientific thinking in solving the problem posed in the thesis. Methods for solving the problem and creating the model were investigated and chosen by the authors. The paper presents the rationale for all stages of the study.

Practical/applied nature of research. Extent to which the theoretical background is related to the international or Russian managerial practice; development of applied recommendations; justification and interpretation of the empirical/applied results.

The results of the thesis research have practical application in the company. The use of a predictive model will reduce the expenses of logistics operations when delivering fuel to petrol stations. In addition to solving the problems set by the company, the created model allows to get an additional effect when using it - this is a forecast of the need for fuel supplies to oil bases.

Quality of thesis layout. Layout fulfils the requirements of the Regulations for master thesis preparation and defence, correct layout of tables, figures, references.

The thesis layout meets all master's thesis requirements.

Originality of the text. All sources of match identified by the Safe Assign system follow the allowed cases, the paper does not contain any elements of plagiarism.

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The Master thesis of Panchenko Anastasiia, Semenova Anna, Sivash Elizaveta meets the requirements for master thesis of MiBA program thus the authors of the thesis can be awarded the required degree.

Date: 10.06.2023

Scientific Advisor: Ass.Professor, Candidate of Mathematics and Physics Sciences Elvira V. Strakhovich