SCIENTIFIC ADVISOR'S REFERENCE

Program:	Master in Business Analytics and Big Data
Student:	Zavadskaya Ekaterina
Title of thesis:	DATA-DRIVEN DEVELOPMENT OF LOYALTY PROGRAM FOR RETAIL 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 goal of this research is to segment consumers based on data for the period from 2020 to 2021 in order to update the existing loyalty programme and thus attract customers to give a favour to a specific retailer. With the help of IT instruments, the data received from the company were prepared and further RFM analysis was carried out. The research is conducted to respond to the real needs of the retail company.

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 thesis is consisted of 3 chapters and appendices. The first chapter overviews theoretical foundations of the development of a loyalty program and describes features of developing loyalty programmes. The second chapter provides various types of loyalty programmes and justifies the choice of a multi-level bonus programme as the basis of recommendations. It also explains the chosen method of RFM analysis for further segmentation and describes the company providing the data. In the third chapter, the selected method of RFM analysis is considered together with data gathering and criteria choice. The third chapter examines visualized results for each city, where the analyzed supermarket chain is located, a new loyalty programme is proposed with the possible results of its implementation. Theoretical and practical parts of the thesis are well balanced.

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.

The author analyzed three alternatives to conduct segmentation of clients: ABC XYZ, Lifetime Value, RFM segmentation. The comparative analysis of possible methods application guided to the conclusion in favor of RFM analysis as it helps to segment customers even in the absence of a deep understanding of the customer's characteristics, that is, only by the number of purchases and the prescription of purchases. All the recommendations given are relevant to reach the master thesis goal.

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 project includes analysis of supermarket chain data provided by the company. Data included information on purchases of customers participating in the loyalty programme. The general characteristics of the data was processed through 26 Excel sheets with 5 195 516 records. Thus volume of data and RFM method chosen by the author meets the requirements of MIBA program in terms of Big Data analytics.

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.

Quality of selecting research tools and methods; data validity, adequacy of used data for chosen research tools and methods; completeness and relevance of the list of references are demonstrated at the good level.

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 author have managed to segment 263 240 customers in the four cities of the supermarket chain to provide recommendation for loyalty program improvement. As a result to increase the average amount of purchases a new multi-level loyalty bonus program was proposed with a dependence of the percentage of bonus accrual on the number of purchases for the previous month. It is important to note hard-working style of the student and ability to manage double labor intensity while working on master thesis without

loosing the quality of findings for the company.

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

Layout fulfils the requirements of the Regulations for master thesis preparation and defence. All tables and figures are given with proper references.

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 **STUDENT Zavadskaya Ekaterina** meets the requirements for master thesis of MiBA program thus the author of the thesis can be awarded the required degree.

Date: 09.06.2022

Scientific Advisor

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