SOLUTION THE PROBLEMS OF THE LOADS RATIONAL DISTRIBUTION ON THE SERVER BY MATHEMATICAL METHODS

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Abstract. The article is devoted to solving practical economic problems using methods of mathematical modeling. The authors studied modern scientific publications, which allowed to draw a conclusion about the relevance of solving optimization problems using mathematical methods. The research was carried out by the authors on the basis of the hosting company "BEGET", a method was used in practice to optimize the target rational distribution of specific loads on the server using the simplex method and the artificial base method. The purpose of the study was to find a rational distribution of the server applications permissible loads or services on the server. The relevance of solving this problem for the analyzed company is proved. The solution sequence is described: the existing constraints are indicated, a model for optimizing the stages is constructed in the form of the finding linear programming problem, the problem is reduced to the canonical form, simplex tables are constructed, and the optimal plan is found. Further, the solution of the problem was verified by substitution into the

objective function. In the issue, the optimal result is obtained, which solves the important task for the company.

Keywords: server; simplex method; rational distribution of loads; artificial base method; linear programming problem.

JEL codes: C 02; C 61.

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