Universiti Teknologi MARA

Model-based Home Budget

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DECLARATION

I hereby declare that the work in this project is my own except for quotations and summaries which have been duly acknowledged.

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ABSTRACT

At present, the use of expert systems has become a trend. There are so many systems related to budgeting system or quantitative modeling but there is no specification on home budgeting systems that formulate and construct a model. In order to overcome the described problems, three objectives are going to be achieved in this project. The first objective of the research is to identify the home budget planning based on priority and uncertainty factors according to the period. Second objective is to analyze and calculate the expenditures of the home user. The last objective is to formulate and construct a model for home budget planning using the defined factors and priority. The rules and formulation for the expenditures were created from the knowledge data. A Bayesian approach was proposed as a formulation in calculating the home budget. The present system applies model to develop home budgeting for quantifying uncertainty in the establishment of the system. As an output for the users, the expenses will be displayed through the bar graph model. The model showed the percentage for each expenses factor. The developed system is then used for the short and long term prediction and modeling of home budgeting. On the other hand, model-based home budget has concluded that future expansion in home budgeting should concentrate on getting more accurately prediction of the budget.

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