

ABSTRACT

Scoring models of players behavior for financial performance of the company estimation.

Master's thesis: 91 p., 29 fig., 24 tab., 2 appendixes and 19 sources.

The object of study – clients of the online-games provider and their behavior.

Subject of research – scoring behavioral models and methods of intellectual data analysis for quantitative and qualitative evaluation of clients.

Purpose – constructing behavioral models of clients and comparison for existing ones.

The method of research – binary classification models, tree ensembles, hierarchical classification models, survival analysis models.

The paper represents results of estimation of behavioral models, based on boosted tree ensembles. The results of the comparative analysis of the obtained models are described with the help of information criteria, and in terms of their accuracy. It was found that boosted trees are best suited for describing non-linear dependencies in the data, and they tend to better performance. Therefore, the usage of such models is strongly recommended for further studies.

Theses and a scientific article were written based on master's dissertation. The theses have been published in the SAIT-2018 conference Book of Abstracts. The scientific article is going to be published in the electronic collection of reports at the CEUR publishing house.

Recommendations for further development consist of improvement of existing behavioral scoring models, and improvement of existing prototype of decision support system that is based on built models.

SCORING, STATISTICAL DATA ANALYSIS, BEHAVIORAL MODELS, TREE ENSEMBLES, XGBOOST, LOGISTIC REGRESSION, SURVIVAL ANALYSIS.