

ABSTRACT

Thesis contains: 100 p., 14 tables, 12 fig., 2 add. and 12 references.

E-COMMERCE, INTERNET SHOP, MARKETPLACE, CHURN PROCESS, STOCHASTIC PROCESS, COMPOUND POISSON PROCESS, MONTE CARLO METHOD.

The purpose of this thesis is to construct a mathematical model for the purpose of forecasting the churn of clients of the online marketplace. In this work a preliminary analysis of the subject area was carried out on the task the relevance and potential, and the availability of existing solutions. In this paper the problem setting, the main assumptions under which the search for the solution was made, the main theoretical and practical methods of admission, which allow solving the problem clearly (analytically) or approximation were presented. As a result, a statistical software module was created. It allows modeling the churn process of marketplaces' clients and assessing the likelihood of their potential for business. At the end of the paper the results of experiments that were obtained using the constructed model are presented. It is necessary to admit, that created model will be very useful for Internet marketplaces, which have enough information on the conclusion of transactions and their value between sellers and buyers operating on the site, or can evaluate this information in a certain way.