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Analysis of refusals when operating a car service with a non- stationary inflow of requests

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ABSTRACT

During their work, car repair shops often fail to fulfil all received requests. This leads to economic losses and bad reputation of the services. Every car repair shop has to deal with this problem, to ensure its successful development. During the operation of a car service there are periods during which the inflow increases and this leads to refusals of orders. The present analysis examines the nature of this flow of refusals and provides opportunities to address this issue. Two peaks of rejections have been determined in the months of October–November (about 189.86 rejections) and April–May (about 194.75 rejections). The inflow is defined as non-stable. Some possible options are to create additional jobs and hire workers, to use outsourcing services in other garages or to create additional storage areas for waiting cars. Two peaks of service failures are identified, which are in the months of October–November (about 189.86 failures) and April–May (about 194.75 failures). These two peaks account for 48% and 46.79% of all failures, respectively. The results of the research are presented. The proposed approach can be used to analyze and optimize the activities of other garages.

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