

## Application the Queuing Theory in the Warehouse Optimization

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**Abstract :** The aim of optimization of store management is not only designing the situation of store management itself including its equipment, technology and operation. In optimization of store management we need to consider also synchronizing of technological, transport, store and service operations throughout the whole process of logistic chain in such a way that a natural flow of material from provider to consumer will be achieved the shortest possible way, in the shortest possible time in requested quality and quantity and with minimum costs. The paper deals with the application of the queuing theory for optimization of warehouse processes. The first part refers to common information about the problematic of warehousing and using mathematical methods for logistics chains optimization. The second part refers to preparing a model of a warehouse within queuing theory. The conclusion of the paper includes two examples of using queuing theory in praxis.

**Keywords :** queuing theory, logistics system, mathematical methods, warehouse optimization

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