

# Case study on queuing theory

Business



## **Queuing Theory Case Study:**

Queuing theory is the branch of probability theory, which is aimed to research the rational choice of the structure and system of service on the basis of the streams of demands for service, the type and the length of a queue.

In queuing theory the methods of probability theory and mathematical statistics are applied. The first attempts to research the problems of queues and their management were carried out in Denmark in the beginning of the 20th century. Queuing theory appeared during the research of the telecommunication systems and the manner of their work. The telephone operators connected the people who tried to ring someone up one by one. People had to wait in a queue in order to make a call. Of course, the queues were different and on the basis of the types of the queues various systems of management appeared.

Later on queuing theory was applied in other spheres of the human life: business, office, store, plant, factory, cafe, hospital, etc. Queuing theory is connected not just with probability theory and mathematics but psychology and social studies, because staying in a queue is a serious psychological discomfort and disappointment for everyone. People get angry, irritated and face stress and the further activity of an individual is quite personal and unpredictable. For example, if one sees a queue, he can just leave it and the firm loses a client, so its task is to make the process of staying in the queue favourable and less irritable. Various techniques and methods are used in this case, for example, offices and hospitals have TV sets which catch clients'

attention; stores have the special shelves of products which attract consumer's attention while he waits in a queue. Queuing theory is an interesting topic for the research, because it touches upon every sphere of the human life, as every day people stay in a queue and even do not imagine that the queue is managed in the certain professional way.

The student is able to research the general information about queuing theory and that focus on the definite case which dwells on the direct application of the methodology of the theory. The student is asked to analyze the cause and effect of the problem which has occurred in the case and try to solve the problem using the knowledge on queuing theory and its major aspects.

When a case study becomes a serious challenge for students, they can use the pluses of the web and take advantage of a free example case study on queuing theory. Experienced writers share their knowledge and skills in order to provide students with a good free sample case study on queuing theory and teach them to analyze the topic well and format the paper professionally.