

Order and Delivery Times Simulation

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Abstract: - It is clearly known that one of the big problems of production companies is not to deliver orders on time. When it happens, companies would have to pay a penalty fee and lose their reliability and so their customers. For that reason, companies have to have good plans or schedules about receiving and delivering times of orders. In this work, as a case study, simulation program of order and delivery times of a computer company where ordered computers are constructed according to customer preferences and delivered to customers by the via of cargo is described and simulation model is shown with an example. In this way, it is shown that with a simple simulation program, companies can solve their big problems effectively on order and deliver times.

Key-Words: - Order, Delivery Time, Simulation, Modeling.

1 Introduction

The most typical feature of our period is the rapid changing of societies. The most evident factors that speed the changing in societies are seen in information, technology, communication and economy fields. In our period called as information era, the information society concept has appeared. The information in information society is an important and basic source. The individuals and societies compete to gain that basic source.

The information technologies that mark the following century recreate the contemporary human profile. In the rapidly changing and developing world of today, it is not expected from individuals to find information from a single source and then memorize it, in contrary it is aimed to grow individuals who know how to access to and use information, and are able to establish solution methods against problems by using the information they get. To design effective and interactive learning environments compatible with the information technologies is very important for getting such features.

For this reason, in order the Information Technologies studies that are considered important also in our country and academically began to be institutionalized can be effectively continued in other universities of our country, the knowledge and experience on the subject must be transferred, in other words, must be shared. Especially, in respect to competition with other countries in the world, the information society must take significant steps regarding to software sector for purpose of being in line with our era. So, computers and software are inevitable supplies for society. Sometimes, with a simple program written for special purposes big problems can be solved easily. Customers usually wish to procure their orders in the shortest possible time and find delays quite unfavorable. If an organization is

unable to return an order and if its customer rejects to wait during the time it takes to procure the order, the organization will lose and therefore will not have any earnings. The situation was such that some days the marketing department had serious difficulties working due to complaints such as "I gave my order to your representative selling your equipment here, and I also made the payment but I still haven't received my order." Customers had to be put on waiting lists, and most of these customers were lost because they chose other brands instead of waiting. Also, the high rate of inventory cycle speed, and the fact that the cost for giving orders had increased, brought the idea "Are we doing something wrong in this business?" to the executives' minds. Hereby, they started using the Economic Order Model to determine the most appropriate amount and the goal is to prevent losing customers, who may turn towards alternative sources for procuring their unsatisfied needs. Many authors share the same idea on order model that not delivering the orders on time, without scheduling order-delivery system, or without inventory policies, companies lose many things economically [1-9]. To solve their problems companies generally pay big amount of money to buy simulation software. However, they can solve their problems with a simple program as it will be stated in this work.

In this work, working system of a simulation program, written for a construct and sell computer company and can be easily used by the others, is represented and phases of simulation, system design and improvement studies are all explained. After the program is introduced, its main sections, working logic, user orientations and sample practices are defined.