SUCH - A DYNAMIC INTERACTIVE SIMULATOR FOR INTRODUCING THE BASIC CONCEPTS OF SUPPLY CHAIN MANAGEMENT

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SUCH (Supply Chain Management Simulator) is a four-party, dynamic interactive simulator designed to be used as a management gaming platform that introduces the basic concepts of Supply Chain Management. Though primarily aimed to be used as a part of a graduate level course, it can also be used for upper-division (junior and senior level) undergraduate courses and introductory professional seminars pertaining to the subject. LOGA, a 'prototype' version of SUCH, which had been introduced by Bowersox (1986), has been used as a part of the graduate level course 'Strategy of Distribution Management' in the Industrial Engineering Department of Istanbul Technical University for three years. The model behind LOGA was developed on the basic scenario outlined by Bowersox and transferred into computer environment on an Excel spreadsheet. The basic procedure of using LOGA was to hand out decision sheets weekly to four groups formed by the students, entering the decisions made by the groups to the spreadsheet which then calculates the performance measures, and feeding back the figures of the current week as summary reports to the groups. SUCH is modeled using Vensim, a system dynamics modeling and analysis package, and thus offers certain advantages compared to LOGA which was modeled using a spreadsheet. One of these advantages is the existence of flexible model analysis features provided by Vensim, which can be used for introducing the underlying model to the students during the late phases of the gaming period or after the gaming is completed. Another important advantage of the model designed on Vensim is that it enables the design of various interfaces. An interface was designed to be used by the instructor for entering the decisions and observing the performance measures. Another interface will be designed for use by the students who play the distributed version of the game, real time on a client/server system, which is planned as a future extension of the project.