Supermarket Simulation

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Abstract

The project consists of a 3D simulation of a supermarket using hypothetical data, which considers 18 different types of arriving products that are split by types into 6 different stocks, each one receiving 3 types of products. Prior to supermarket opening, simulation distributes products on the shelves. Purchases are self-service and only cashiers are operated by attendants. Two cashiers are fixed and 3 operates when necessary. During the period of operation of the supermarket, operators will replace the products on the shelves to keep them stocked. Project was developed using FlexSim software.

Keywords
flexsim, supermarket, stock, products.

Biographies

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and data science for graduate and undergraduate students. His research interests include demand planning, inventory management, supply chain, and multi-criteria decision making.

Rodrigo Luiz Gigante is master in Production Engineering from the University of São Paulo (2010); Bachelor of Applied Mathematics and Scientific Computing from the University of São Paulo (2007). He is a professor at Facens University. His areas of expertise are Operational Research, Discrete Event Simulation, Scheduling, Queue Theory, Production Planning and Control and Logistics.