

A Modified Algorithm for Converting Signed Digraph to Forrester Diagram Utilizing in the System Dynamics

Wei-Tzen Yang, Li-chuan Chu and Nai-Wen Guo
Tamkang University

Abstract

A modified algorithm for converting signed digraph to Forrester schematics has been introduced. The elements affecting the system, such as information delays, material delays, and multipliers can be added to the Burns algorithm to make the framework of system dynamics more complete. An illustrative example is given to verify the results.

Keywords: System Dynamics, Forrester Diagram, Signed Digraph, Modified Algorithm, Burns Algorithm.