

BUSINESS MANAGEMENT SIMULATIONS AS A PEDAGOGICAL TOOL TO IMPROVE STUDENT'S SYSTEM DYNAMICS THINKING

Chris Papenhausen

Satyanarayana Parayitam

ABSTRACT

The leading business management simulations used in higher education and organizational training programs provide multiple benefits. Used primarily in strategy courses and other related areas, these simulations have been found to effectively introduce business concepts, inculcate a cross-functional understanding of business, build team skills, enable better translation of data into information, and improve overall decision-making skills (Kulkarni and Sivaraman, 2013.) Although the most popular strategic management simulations do not explicitly incorporate system dynamics theory, this paper argues that the implicit characteristics of system dynamics in these simulations have powerful learning potential. We also argue that the key characteristics of system dynamics- multiple feedback cycles, time delays, the differences between stocks and flow, and nonlinearities - are non-intuitive and therefore are more easily learned in experiential exercises such as simulations. This paper first lays out systems dynamics theory and its application to simulations. Second, one of the most popular strategic management simulations is analyzed and its primary features that exhibit system dynamics are presented. Finally, the implications for enhancing student decision-making abilities are discussed.