

An Extended Diffusion Model for the Marketing Dynamics of Generations of Mobile Phone Display Panels

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Abstract

In this paper, we investigate the marketing dynamics of generations of mobile phones by using an advanced diffusion model. The adopted model considers the effects of non-uniform influence, and the heterogeneity of the population of potential adaptors on marketing dynamics. This study not only provides a basis for assessment, but also enables us to forecast the influence of recent technologies on earlier stage. Furthermore, we use the Fisher-Pry model to test the substitution on the sales of mobile phone display panels among different generations. The simulated results, compared to the real data, validate the theoretical findings, and therefore point to the ability to forecast the overwhelming growth of marketing dynamics among mobile phone display panel generations.

Keywords: Mobile phone, simulated approach, Bass model, optimization.