Huang, Yeu-Shiang; Liu, Li-Chen; Ho, Jyh-Wen

Decisions on new product development under uncertainties.


Summary: In an intensively competitive market, developing a new product has become a valuable strategy for companies to establish their market positions and enhance their competitive advantages. Therefore, it is essential to effectively manage the process of new product development (NPD). However, since various problems may arise in NPD projects, managers should set up some milestones and subsequently construct evaluative mechanisms to assess their feasibility. This paper employed the approach of Bayesian decision analysis to deal with the two crucial uncertainties for NPD, which are the future market share and the responses of competitors. The proposed decision process can provide a systematic analytical procedure to determine whether an NPD project should be continued or not under the consideration of whether effective usage is being made of the organisational resources. Accordingly, the proposed decision model can assist the managers in effectively addressing the NPD issue under the competitive market.

Keywords: project management; Bayesian decision analysis; new product development
doi:10.1080/00207721.2013.807382