Sequencing heuristic for bicriteria scheduling in a single machine problem

Wen-Jinn Chen¹, * 
Su-Mei Lin² 
Jia-Chi Tsou³

¹ Department of Business Administration 
China University of Technology 
No. 530, Sec. 3, Zhongshan Rd. 
Hu-Kou, Hsin-Chu 303 
Taiwan 
R.O.C. 

² Department of Marketing and Logistics 
China University of Technology 
Hsin-Chu 
Taiwan 
R.O.C. 

Abstract

This paper considers the problem of minimizing the maximum tardiness and the variance of completion times on a single machine. A heuristic is developed to find the optimal schedule for a linear objective function of two criteria by generating only a small set of the efficient schedules. The proposed heuristic is useful to a decision maker since he or she can easily select an optimal schedule from the small set of efficient schedules. A numerical example is given to illustrate the presented heuristic. Computation results are provided to demonstrate the effectiveness of the heuristic.

Keywords: Scheduling, maximum tardiness, completion times, efficient schedule.

*E-mail: cwj@cute.edu.tw

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