Accepted Manuscript

An Approximation Algorithm for a Competitive Facility Location Problem with Network Effects

Ling-Chieh Kung, Wei-Hung Liao

PII: S0377-2217(17)31048-2
DOI: 10.1016/j.ejor.2017.11.037
Reference: EOR 14825

To appear in: *European Journal of Operational Research*

Received date: 17 August 2016
Revised date: 8 October 2017
Accepted date: 19 November 2017

Please cite this article as: Ling-Chieh Kung, Wei-Hung Liao, An Approximation Algorithm for a Competitive Facility Location Problem with Network Effects, *European Journal of Operational Research* (2017), doi: 10.1016/j.ejor.2017.11.037

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- In our location problem, the construction decision affects the consumer demand.
- In our location problem, there are network efects among open facilities.
- The solvability depends on the shape of marginal benefit of building facilities.
- When it is constant, we develop a polynomial-time exact algorithm.
- When it is diminishing, we develop algorithms with worst-case performance guarantees.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/6895053

Download Persian Version:

https://daneshyari.com/article/6895053

Daneshyari.com