

[DOI: 10.20472/IAC.2020.053.004](https://doi.org/10.20472/IAC.2020.053.004)

TAISUKE EHARA

Aoyama Gakuin University, Japan

KAORU KURAMOTO

Aoyama Gakuin University, Japan

YOSUKE KURIHARA

Aoyama Gakuin University, Japan

TOSHIYUKI MATSUMOTO

Aoyama Gakuin University, Japan

SATOSHI KUMAGAI

Aoyama Gakuin University, Japan

OPTIMIZATION OF AN INFORMATION DIFFUSION MODEL OF INFLUENCER MARKETING -EVALUATION OF SPEED- AND COST-ORIENTED MARKETING BASED ON INFLUENCER-MARKET ELASTICITY-

Abstract:

Owing to its high degree of credibility, influencer marketing is incorporated into the advertising activities of many companies. However, it is often unclear for the company which market initiator (defined as the consumer to whom a company should first provide information) should be given information for marketing purposes. A company's choice of market initiators in social networking services influences advertising speed as well as marketing cost.

In this study, market initiator candidates were identified to determine the most suitable market initiator in the information diffusion simulation. The cost effectiveness of each candidate was evaluated in terms of influencer-market elasticity. First, we optimized the information diffusion model in influencer marketing and considered whether this or mass marketing is best for companies. Influencer-market elasticity was then determined based on the information obtained from the simulation. Using such elasticity, we clarified whether companies should request advertising from influential users, with an emphasis on speed of advertising, or from insensitive users, with emphasis on advertising costs. The proposed methods were applied to actual companies, and the most suitable market initiator was identified for the maximum and minimum values of influencer-market elasticity in a certain period.

Keywords:

information diffusion model
social networking service
centrality index

JEL Classification: M10, M31, L19