# Simulating Supplier-Producer Relationship in Halal Food Supply Chain

## Layung Anindya Prasetyanti and Ryuta Takashima

Department of Industrial Administration, Faculty of Science and Technology
Tokyo University of Science
Noda, Chiba Prefecture, Japan
layung.anindya@sbm-itb.ac.id, takashima@rs.tus.ac.jp

#### **Abstract**

Halal as a quality of a food should be maintained from seed to fork. Each actor in a supply chain should not violate halal standard for the supply chain to produce halal food. For a firm to produce halal foods, not only should the firm process the foods according to Islamic rule, it also should confirm that it use only halal ingredients. However, halal is credence quality attributes that cannot be seen easily. Therefore, halal food producer should maintain relationship with its supplier well. The objective of this paper is to simulate behavior of halal food producer in terms of choosing and build relationship with its supplier. The research is performed using agent based modeling, and employed study case of halal food producer in Tokyo.

### **Keywords**

Halal supply chain, supplier-producer relationship, agent based, food supply chain

#### **Biography**

**Layung Anindya Prasetyanti** is currently pursuing master degree in engineering from Industrial Administration, Tokyo University of Technology and Master of Science in management from School of Business and Management Institut Teknologi Bandung.

**Ryuta Takashima** is an Associate Professor in Tokyo University of Science. He got his Ph.D from Tokyo University in Quantum Engineering and System Science.