

## **ANALISIS DAN MITIGASI RISIKO RANTAI PASOK**

### **PADA INDUSTRI BAKPIA**

#### **(Studi Kasus di Bakpiapia)**

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### **ABSTRAK**

Bakpia adalah makanan khas Yogyakarta yang terbuat dari campuran kacang hijau dengan gula yang dibungkus dengan tepung yang kemudian dipanggang. Masa layak konsumsi bakpia yang hanya 5 hari dapat menyebabkan risiko kerugian bagi perusahaan-perusahaan pembuatnya, apalagi permintaan bakpia yang mengikuti naik-turunnya jumlah wisatawan di Yogyakarta membuat jumlah permintaannya sulit diprediksi. Selain itu, masih ada risiko-risiko lain yang dapat memberikan kerugian bagi produsen Bakpia. Sebagai produsen Bakpia dengan jumlah gerai terbanyak, risiko lebih memungkinkan untuk didapatkan oleh Bakpiapia sehingga perlu dilakukan analisis dan mitigasi risiko rantai pasok untuk mengurangi kerugian yang bisa timbul pada kegiatan rantai pasok Bakpiapia.

Proses penilaian risiko dilakukan melalui 4 tahap yaitu identifikasi risiko, penilaian risiko, evaluasi risiko, serta mitigasi risiko. Identifikasi risiko dilakukan dengan bantuan model *Supply Chain Operations Reference*. Sedangkan penilaian risiko dilakukan dengan bantuan metode *Fuzzy FMEA*. Kemudian berdasarkan prinsip pareto, maka 20% risiko tertinggi akan diberikan rekomendasi tindakan mitigasinya berdasarkan ISO 31000.

Dari hasil penelitian diketahui bahwa dari 16 risiko yang teridentifikasi, ada dua risiko yang harus dimitigasi yaitu risiko database penting hilang dan risiko peramalan kurang tepat. Kemudian berdasarkan pedoman ISO 31000, dihasilkan rekomendasi tindakan mitigasi risiko yaitu dilakukan pembagian risiko dengan pihak lain, dilakukan penurunan efek dan peluang kejadian risiko serta dilakukan upaya penghilangan sumber risiko.

Kata kunci: Bakpia, Fuzzy FMEA, Rantai Pasok, Risiko

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## **SUPPLY CHAIN RISK ANALYSIS AND MITIGATION**

### **ON BAKPIA INDUSTRY**

#### **(Case Study at Bakpiapia)**

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#### **ABSTRACT**

Bakpia is one of Yogyakarta's traditional food made from a mixture of mung beans and sugar wrapped in flour dough before roasted in oven. Bakpia has short time expiration date which is only 5 days. That condition sometimes led bakpia producers into financial loss, let alone the fact that bakpia's demand is highly influenced by the amount of tourist coming to Yogyakarta which only can make the problem worse because it is highly fluctuates everytime. Bakpiapia as a Bakpia's producer with the most outlets will be more likely to get a supply chain risk than other producers. Those facts will be the foundation of this study to analyze and mitigate supply chain risk on Bakpiapia.

The risk analysis process has 4 stages, which are risk identification, risk assesment, risk evaluation and risk mitigation/treatment. Risk identification was done using model from Supply Chain Operations Reference. Then, the risk assesment was done using Fuzzy FMEA method to get the Fuzzy RPN number for each risk that has been identified. Based on Pareto Principal, 20% of the highest risk is the main problem that caused up to 80% loss to company and those 20% will be mitigated to eliminate the probability of the company's losses.

After the research was done, 16 risks has been identified and assesed. There are two risks that are included as 20% of the highest risk at Bakpiapia. Those two are database cannot be accessed and innacurate forecasting process. Some of the recommendations from the writer for those risks are sharing risk with another party, changing the likelihood (occurrence), changing the consequences (severity) and removing the risk source.

**Keywords:** Bakpia, Fuzzy FMEA, Risk, Supply Chain

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