



## INTISARI

Pandemi Covid-19 telah mempengaruhi performa industri tekstil di Indonesia salah satunya pada sistem rantai pasok. Berbagai permasalahan terjadi seperti penurunan kinerja industri tekstil di Indonesia, kenaikan harga bahan baku, penurunan utilitas produksi pada lini *supplier* dan UKM serta rendahnya permintaan konsumen terhadap produk tekstil. Dengan sejumlah permasalahan yang terjadi pada bahan baku dan *supplier*, maka strategi pemilihan *supplier* perlu menjadi perhatian khusus bagi industri tekstil. Pemilihan *supplier* mengalami *Low-Frequency-High-Impact (LFHI) risk* akibat pandemi Covid-19, untuk itu UKM Tekstil perlu melakukan inovasi dalam strategi pemilihan *supplier* yang terintegrasi dengan risiko akibat pandemi Covid-19.

Pada penelitian ini, industri tekstil yang menjadi objek penelitian adalah UKM Calista yang berpusat di Thamrin City Jakarta Pusat. Berdasarkan studi pendahuluan yang dilakukan, UKM merasakan adanya permasalahan dalam bahan baku dan pemilihan *supplier* akibat pandemi Covid-19. Untuk itu, penelitian ini ditujukan untuk membantu UKM dalam evaluasi pemilihan *supplier* yang terintegrasi dengan risiko akibat pandemi Covid-19. Evaluasi pemilihan *supplier* dilakukan berdasarkan kriteria QCDFR (*Quality-Cost-Delivery-Flexibility-Responsiveness*) dengan menggunakan metode AHP-TOPSIS dan Fuzzy-TOPSIS.

Hasil penelitian menunjukkan bahwa kriteria yang menjadi prioritas UKM dalam pemilihan *supplier* di masa pandemi adalah kualitas, diikuti dengan kriteria harga, layanan logistik, fleksibilitas dan pelayanan konsumen. Adapun peringkat *supplier* terbaik antara hasil evaluasi dengan metode AHP-TOPSIS dan Fuzzy-TOPSIS pada *supplier* bahan Monalisa dan Wolfis menghasilkan perbedaan peringkat alternatif. Hal tersebut menunjukkan bahwa alternatif *supplier* terbaik berdasarkan evaluasi multi-kriteria dapat memiliki peringkat yang berbeda pada evaluasi risiko. Dengan demikian, penelitian ini dapat memberikan gambaran secara menyeluruh bagi UKM Calista dalam pemilihan *supplier* ditengah pandemi Covid-19.

Kata kunci : Covid-19, pemilihan *supplier*, risiko *supplier*, AHP, Fuzzy, TOPSIS



## ABSTRACT

Covid-19 pandemic has been impacting the performance of textile industry in Indonesia, specifically in supply chain system. Several problems occurred such as the decline of textile industry performance in Indonesia, the increase in the price of raw materials, the decrease in production utility in the line of suppliers and the low SME's consumer demand for textile products. With a number of problems that occur in raw materials and suppliers, the supplier selection strategy requires specific attention for the textile industry. The selection of suppliers is experiencing Low-Frequency-High-Impact (LFHI) risk due to the Covid-19 pandemic, therefore textile SMEs need to innovate in supplier selection strategy that integrated with risks due to the Covid-19 pandemic.

In this study, UKM Calista as the object of the research, is based in Thamrin City, Central Jakarta. Based on a preliminary study, SMEs faces several problems for raw materials and supplier selection due to the Covid-19 pandemic. Then this research is intended to assist SMEs in evaluating supplier selection that is integrated with risks due to the Covid-19 pandemic. Evaluation of supplier selection is carried out based on the QCDFR (Quality-Cost-Delivery-Flexibility-Responsiveness) criteria using the AHP-TOPSIS and Fuzzy-TOPSIS method.

The result showed that the priority criteria for SMEs in supplier selection during pandemic is quality, followed by price, logistics services, flexibility and customer service. The best rank suppliers of Monalisa and Wolfis fabric resulted in differences in alternative rankings. This shows that the best alternative supplier based on multi-criteria evaluation have different ratings on risk evaluation. Therefore, this research able to provide a comprehensive description for Calista SMEs in supplier selection during the Covid-19 pandemic.

Keyword : Covid-19, Supplier Selection, Supplier Risk, AHP, Fuzzy, TOPSIS