

INTISARI

Kehadiran internet dan teknologi digital berdampak pada perubahan gaya hidup masyarakat menjadi cenderung mengikuti tren. Pertukaran informasi yang semakin cepat mengakibatkan preferensi konsumen terhadap produk cepat berubah dan berdampak pada siklus hidup produk yang semakin singkat. Untuk menjawab tantangan pasar tersebut, pihak perusahaan perlu meningkatkan efisiensi kinerja rantai pasok agar memiliki daya saing yang kompetitif. Salah satu faktor penting untuk rantai pasok yang efisien ialah ketepatan dalam memilih *supplier*. Sebagian besar penelitian terkait pemilihan *supplier* berfokus pada penentuan *supplier* terbaik sedangkan pembentukan konfigurasi rantai pasok memerlukan adanya *list of potential supplier* sebagai usulan untuk optimalisasi keseluruhan rantai pasok agar dihasilkan solusi global optimum. Penelitian ini bertujuan untuk merancang prosedur pemilihan *supplier* potensial. Model yang dibangun menggunakan metode evaluasi subjektif dan objektif.

Prosedur pemilihan *suppliers potensial* terdiri dari empat tahap utama. Tahap pertama ialah melakukan identifikasi kriteria melalui studi literatur dan wawancara. Tahap kedua ialah pembobotan kriteria kualitatif menggunakan *Best Worst Method* (BWM). Tahap ketiga ialah penentuan peringkat *supplier* menggunakan *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS). Nilai *output* TOPSIS pada tahap ketiga digunakan sebagai salah satu variabel *output* pada tahap keempat. Selanjutnya, tahap keempat ialah pemilihan *suppliers* potensial menggunakan *Data Envelopment Analysis* (DEA). Model yang dibangun diuji coba dengan diimplementasikan pada empat tempat berbeda yaitu di Batik Keraton, Safirah Collection, 2R Batik Craft, dan Kampung Arab Resto.

Hasil implementasi model di Batik Keraton, Safirah Collection dan Kampung Arab Resto memberikan rekomendasi *supplier* potensial yang sesuai dengan kondisi aktual namun untuk studi kasus di 2R Batik Craft terdapat satu usulan *supplier* yang tidak sesuai dengan keputusan aktual. Terdapat beberapa perbedaan urutan ranking antara hasil evaluasi variabel kualitatif dengan hasil akhir pada evaluasi variabel kuantitatif pada studi kasus di Batik Keraton, Safirah Collection dan 2R Batik Craft. Hal tersebut menunjukkan bahwa evaluasi objektif tidak selalu memperkuat hasil dari evaluasi subjektif, bahkan evaluasi objektif berpengaruh signifikan terhadap perubahan hasil keputusan akhir. Model ini memberikan hasil yang valid meskipun terdapat beberapa perbedaan dengan kondisi aktual namun tidak berbeda secara signifikan.

Kata Kunci: *Best Worst Method* (BWM), *Data Envelopment Analysis* (DEA), *supplier* potensial, *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS)

ABSTRACT

The presence of the internet and digital technology has an impact on people's lifestyle changes that tend to follow trends. The faster information exchange results in consumer preferences for products changing rapidly and impacting the shorter product life cycle. To deal with the market challenges, the company needs to improve the supply chain performance efficiency in order to have competitive competitiveness. One of the important factors for an efficient supply chain is the accuracy in selecting suppliers. Most of the research related to supplier selection focuses on determining the best supplier while the establishment of supply chain configuration requires a supplier list of potential as a proposal for the optimization of the entire supply chain so that an optimum global solution is produced. This study aims to design procedures for selecting potential suppliers. The model is built using subjective and objective evaluation methods..

The procedure for selecting potential suppliers consists of four main stages. The first step is to identify criteria through literature studies and interviews. The second stage is weighting the qualitative criteria using Best Worst Method (BWM). The third stage is determining supplier rank using Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). The TOPSIS output value in the third stage is used as one of the output variables in the fourth stage. Furthermore, the fourth stage is the selection of potential suppliers using Data Envelopment Analysis (DEA). The model built was tested by being implemented in 4 different places, namely at Batik Keraton, Safirah Collection, 2R Batik Craft, and Kampung Arab restaurant.

The results of the implementation of the model at Batik Keraton, Safirah Collection, and Kampung Arab Restaurant, they gave recommendations for potential suppliers that were in accordance with the actual conditions, but for the case study at 2R Batik Craft, there was one supplier proposal that was not in accordance with the actual decision. Furthermore, there are also several differences in the ranking order between the results of the evaluation of qualitative variables with the final results in evaluating the quantitative variables in the case study at Batik Keraton, Safirah Collection, and 2R Batik Craft. This shows that the objective evaluation does not always confirm as the results of subjective evaluation, even the objective evaluation a significant effect on changes in the final decision. This model gives valid results even though there are differences with actual conditions but not significantly different.

Keywords: *Best Worst Method (BWM), Data Envelopment Analysis (DEA), potential suppliers, Technique for Order Preference by Similarity to Ideal Solution (TOPSIS).*