

SISTEM PENDUKUNG KEPUTUSAN PEMILIHAN *COFFEE SHOP* DI KOTA YOGYAKARTA DENGAN MENGUNAKAN METODE AHP DAN TOPSIS

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INTISARI

Latar Belakang: Pertumbuhan industri kopi di Yogyakarta pesat dengan 3000 *coffee shop* pada 2022. *Coffee shop* kini menawarkan kemudahan dan kenyamanan digital, terutama bagi pelajar. Banyak pilihan membuat pemilihan *coffee shop* kompleks. Sistem Pendukung Keputusan dengan metode AHP dan TOPSIS diperlukan untuk membantu memilih *coffee shop* yang tepat.

Tujuan: Penelitian ini bertujuan mengembangkan Sistem Pendukung Keputusan (SPK) menggunakan metode *Analytical Hierarchy Process* (AHP) dan *Technique for Order Preference by Similarity to an Ideal Solution* (TOPSIS)

Metode Penelitian: Metode AHP digunakan untuk menentukan bobot kriteria berdasarkan nilai perbandingan berpasangan, sementara metode TOPSIS mengidentifikasi solusi ideal positif dan negatif, serta menghitung jarak ke solusi ideal untuk pemeringkatan.

Hasil: Hasil penelitian menunjukkan bahwa *coffee shop* Silol Kopi & Eatery dan Legend Coffee memperoleh skor preferensi tertinggi (0,887), sedangkan Awor Gallery & Coffee memperoleh skor terendah (0,030).

Kesimpulan: Visualisasi menggunakan Streamlit menampilkan data interaktif, termasuk Matriks Keputusan, Faktor Normalisasi, Matriks Dinormalkan, Matriks Bobot, serta Solusi Ideal Positif dan Negatif.

Kata-kunci: Sistem Pendukung Keputusan, AHP, TOPSIS, *Coffee Shop*, Yogyakarta, Visualisasi Data, Streamlit

**DECISION SUPPORT SYSTEMS
COFFEE SHOP SELECTION IN YOGYAKARTA
CITY USING AHP AND TOPSIS METHOD**

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ABSTRACT

Background: *The coffee industry in Yogyakarta is growing rapidly with 3000 coffee shops by 2022. Coffee shops now offer digital convenience and comfort, especially for students. Many choices make coffee shop selection complex. A Decision Support System with AHP and TOPSIS methods is needed to help choose the right coffee shop.*

Research Objective: *This research aims to develop a Decision Support System (SDM) using the Analytical Hierarchy Process (AHP) and Technique for Order Preference by Similarity to an Ideal Solution (TOPSIS)*

Research Method: *The AHP method is used to determine the criteria weights based on pairwise comparison values, while the TOPSIS method identifies positive and negative ideal solutions, and calculates the distance to the ideal solution for ranking.*

Results: *The results showed that Silol Kopi & Eatery and Legend Coffee obtained the highest preference score (0.887), while Awor Gallery & Coffee obtained the lowest score (0.030).*

Conclusion: *Visualization using Streamlit displays interactive data, including Decision Matrix, Normalized Factors, Normalized Matrix, Weight Matrix, and Positive and Negative Ideal Solutions.*

Keywords: *Decision System, AHP, TPSOS, Coffee Shop, Yogyakarta, Data Visualization, Streamlit*