

ABSTRACT

The development of Artificial Intelligence (AI)-based chatbots, such as ChatGPT and Google Gemini, has increased their utilization in academic activities. This study aims to analyze and compare user experience and technology acceptance of both chatbots using the User Experience Questionnaire (UEQ) and the Technology Acceptance Model (TAM), while integrating the two methods through convergence analysis. A quantitative method with a descriptive comparative approach was employed. Data were collected through a questionnaire distributed to Universitas Siliwangi students who had used both ChatGPT and Google Gemini. Of the 195 respondents, 191 met the research criteria. The UEQ results indicated that ChatGPT achieved higher scores in Attractiveness (1.23), Perspicuity (1.21), Efficiency (1.17), and Stimulation (1.06), whereas Google Gemini outperformed ChatGPT in Dependability (0.85) and Novelty (0.56). The TAM results showed that ChatGPT obtained higher scores for Perceived Usefulness (5.55) and Perceived Ease of Use (5.59) than Google Gemini, which scored 5.23 and 5.30, respectively. The convergence analysis revealed positive and statistically significant correlations ($p < 0.001$), with correlation coefficients ranging from 0.464 to 0.679, indicating moderate to strong relationships. Based on the synthesis of the UEQ and TAM results, ChatGPT demonstrated superior performance in supporting academic activities. Furthermore, integrating UEQ and TAM provided a more comprehensive evaluation of chatbot quality by combining user experience and technology acceptance perspectives.

Keywords: ChatGPT, Google Gemini, User Experience Questionnaire (UEQ), Technology Acceptance Model (TAM).

ABSTRAK

Perkembangan chatbot berbasis kecerdasan buatan (Artificial Intelligence/AI), seperti ChatGPT dan Google Gemini, telah meningkatkan pemanfaatannya dalam aktivitas akademik. Penelitian ini bertujuan menganalisis dan membandingkan pengalaman pengguna serta penerimaan teknologi pada kedua chatbot menggunakan User Experience Questionnaire (UEQ) dan Technology Acceptance Model (TAM), serta mengintegrasikan kedua metode melalui analisis konvergensi. Penelitian menggunakan metode kuantitatif dengan pendekatan deskriptif komparatif. Data diperoleh melalui penyebaran kuesioner kepada mahasiswa Universitas Siliwangi yang pernah menggunakan ChatGPT dan Google Gemini. Dari 195 responden, sebanyak 191 memenuhi kriteria penelitian. Hasil UEQ menunjukkan bahwa ChatGPT memperoleh nilai lebih tinggi pada dimensi Attractiveness (1,23), Perspicuity (1,21), Efficiency (1,17), dan Stimulation (1,06), sedangkan Google Gemini unggul pada Dependability (0,85) dan Novelty (0,56). Hasil TAM menunjukkan bahwa ChatGPT memiliki nilai Perceived Usefulness (5,55) dan Perceived Ease of Use (5,59) yang lebih tinggi dibandingkan Google Gemini, masing-masing sebesar 5,23 dan 5,30. Analisis konvergensi menunjukkan korelasi positif dan signifikan ($p < 0,001$) dengan koefisien 0,464-0,679 (kategori sedang-kuat). Berdasarkan sintesis UEQ dan TAM, ChatGPT menunjukkan performa yang lebih unggul dalam mendukung aktivitas akademik, serta integrasi kedua metode memberikan evaluasi yang lebih komprehensif terhadap kualitas chatbot.

Kata Kunci: ChatGPT, Google Gemini, User Experience Questionnaire (UEQ), Technology Acceptance Model (TAM).