

## ABSTRAK

Revolusi Industri 4.0 telah mentransformasi perpustakaan perguruan tinggi menjadi pusat sumber belajar berbasis digital yang menuntut efisiensi tinggi dalam akses informasi. Perpustakaan UPN “Veteran” Yogyakarta telah mengimplementasikan website *Online Public Access Catalogue* (OPAC) sebagai sarana utama penelusuran koleksi. Namun, identifikasi awal menunjukkan adanya kendala bagi pengguna, mulai dari mekanisme pencarian yang kaku karena ketergantungan pada kata kunci spesifik, hingga tampilan antarmuka yang dianggap kurang modern dan tidak intuitif. Kondisi tersebut menciptakan kesenjangan antara kapabilitas sistem saat ini dengan ekspektasi pengguna, sehingga diperlukan evaluasi mendalam untuk mengidentifikasi akar permasalahan *usability website* OPAC tersebut.

Penelitian ini menggunakan pendekatan campuran (*mixed-methods*) untuk mengevaluasi tingkat *usability website* OPAC melalui kombinasi metode kuantitatif melalui *Post-Study System Usability Questionnaire* (PSSUQ) Versi 3 dan kualitatif dengan *Retrospective Think Aloud* (RTA). Data kuantitatif diambil dari 137 responden mahasiswa aktif melalui teknik *sampling* rumus *Slovin* dengan *margin of error* 10%. Proses evaluasi kualitatif dilakukan melalui wawancara RTA terhadap 8 partisipan untuk menggali pengalaman dan hambatan perilaku saat menyelesaikan 10 skenario tugas pencarian katalog secara langsung. Perumusan rekomendasi perbaikan sistem dikembangkan dengan mempertimbangkan prinsip *10 Usability Heuristics* untuk memberikan solusi perbaikan yang aplikatif dan sesuai dengan standar interaksi manusia dan komputer.

Hasil penelitian menunjukkan bahwa tingkat *usability website* OPAC secara keseluruhan masih berada di bawah standar norma PSSUQ dengan nilai rata-rata (*mean*) sebesar 3,12. Aspek *Interface Quality* ditemukan sebagai dimensi paling kritis dengan skor 3,29, di mana seluruh indikatornya berada di bawah standar norma yang diharapkan. Meski demikian, beberapa aspek pada *Information Quality* telah memenuhi standar, terutama terkait kemampuan menemukan lokasi buku dan kejelasan pesan kesalahan. Melalui metode RTA, penelitian ini berhasil mendiagnosis 20 rumusan masalah spesifik, termasuk gangguan navigasi akibat konfirmasi *resubmit form* serta sistem pencarian yang tidak toleran terhadap kesalahan pengetikan. Kontribusi penelitian ini berupa rekomendasi teknis yang komprehensif, seperti penerapan mekanisme *Fuzzy Search* dan penataan ulang tata letak fitur *login*, yang diharapkan menjadi landasan strategis bagi pengelola perpustakaan dalam meningkatkan kualitas layanan digital secara menyeluruh.

**Kata Kunci:** *Usability*, OPAC, PSSUQ, RTA, Perpustakaan

## ABSTRACT

*The Industrial Revolution 4.0 has transformed university libraries into digital-based learning resource centers that demand high efficiency in accessing information. The UPN “Veteran” Yogyakarta Library has implemented the Online Public Access Catalogue (OPAC) website as the primary tool for searching library collections. However, preliminary identification indicates that users experience several difficulties, ranging from rigid search mechanisms due to dependence on specific keywords to an interface design perceived as less modern and not intuitive. These conditions create a gap between the current system capabilities and user expectations, indicating the need for an in-depth evaluation to identify the root causes of usability issues in the OPAC website.*

*This study employs a mixed-methods approach to evaluate the usability level of the OPAC website through a combination of quantitative and qualitative methods. The quantitative data were collected using the Post-Study System Usability Questionnaire (PSSUQ) Version 3 from 137 active student respondents, determined using the Slovin formula with a margin of error of 10%. The qualitative evaluation was conducted through Retrospective Think Aloud (RTA) interviews with eight participants to explore user experiences and behavioral obstacles while completing ten catalog search task scenarios. System improvement recommendations were formulated based on the principles of the 10 Usability Heuristics to provide practical solutions aligned with human-computer interaction standards.*

*The results indicate that the overall usability level of the OPAC website is still below the PSSUQ normative standard, with a mean score of 3.12. The Interface Quality aspect was identified as the most critical dimension, with a score of 3.29, where all indicators fall below the expected normative standard. Nevertheless, several aspects of Information Quality meet the standard, particularly regarding the ability to find book locations and the clarity of error messages. Through the RTA method, this study identified 20 specific usability issues, including navigation disruptions caused by resubmit form confirmation and a search system that lacks tolerance for typing errors. The contribution of this research lies in providing comprehensive technical recommendations, such as implementing a fuzzy search mechanism and reorganizing the layout of the login feature, which are expected to serve as a strategic foundation for library managers in improving the overall quality of digital services.*

**Keywords:** *Usability, OPAC, PSSUQ, RTA, Library*