ABSTRAK

Perbedaan struktur informasi pada *marketplace* menyebabkan data produk *skincare* sulit dibandingkan secara langsung. Penelitian ini bertujuan menganalisis dan memvisualisasikan informasi produk *skincare* pada toko resmi Shopee, Tokopedia, Lazada, dan Blibli melalui *Digital Dashboard Information* berbasis R Shiny. Data publik dikumpulkan pada 29 Juni 2026 menggunakan tujuh kata kunci dan diekstraksi dari berkas *HTTP Archive (HAR)*. Pemeriksaan menunjukkan bahwa keempat *marketplace* memiliki konsep metadata serupa, tetapi berbeda dalam nama *field*, tipe data, format nilai, dan struktur objek. Data kemudian dibersihkan, dinormalisasi, dipetakan berdasarkan merek dan kategori, dideduplikasi, serta diintegrasikan. Proses tersebut menghasilkan 12.000 produk, masing-masing 3.000 produk per *marketplace*. Hasil analisis menunjukkan *cleanser* sebagai kategori terbanyak, Shopee memiliki median harga dan rata-rata rating tertinggi, sedangkan jumlah penjualan tercatat terbesar terdapat pada Lazada. *Dashboard* terdiri atas tab *Overview*, *Information Retrieval*, dan *Data Quality*, yang mendukung penyaringan, pencarian, visualisasi komparatif, pemeriksaan kualitas data, dan ekspor CSV. *Black Box Testing* menunjukkan delapan fungsi berjalan sesuai skenario, sedangkan *usability testing* terhadap lima responden memperoleh indeks 91,2 persen dengan kategori Sangat Baik. Hasil penelitian menunjukkan bahwa *dashboard* mampu menyajikan informasi pasar digital *skincare* secara terstruktur, interaktif, dan transparan dalam konteks data yang dikumpulkan.

Kata kunci: dashboard informasi, information retrieval, marketplace, R Shiny, skincare

ABSTRACT

Differences in information structures across marketplaces make skincare product data difficult to compare directly. This study aims to analyze and visualize skincare product information from official stores on Shopee, Tokopedia, Lazada, and Blibli through an R Shiny-based Digital Dashboard Information. Public data were collected on June 29, 2026, using seven keywords and extracted from HTTP Archive (HAR) files. The marketplaces contained similar metadata concepts but differed in field names, data types, value formats, and object structures. The data were cleaned, normalized, deduplicated, and integrated, while brand names were standardized and product categories classified. This process produced 12,000 products, with 3,000 from each marketplace. The analysis showed that cleanser was the largest category, Shopee had the highest median price and average rating, while Lazada had the highest number of recorded sales in the dataset. The dashboard consists of Overview, Information Retrieval, and Data Quality tabs supporting filtering, searching, comparative visualization, data quality assessment, and CSV export. Black Box Testing confirmed that all eight functions operated as expected, while usability testing involving five respondents achieved an index of 91.2%, categorized as Very Good. The dashboard presents skincare market information in a structured, interactive, and transparent manner within the scope of collected data.

Keywords: information dashboard, information retrieval, marketplace, R Shiny, skincare