

**SISTEM PENDUKUNG KEPUTUSAN PEMILIHAN PRODUK
SABUN WAJAH BERDASARKAN KLASIFIKASI JENIS
KULIT MENGGUNAKAN METODE *CNN* DAN *SAW***

*(Decision Support System For Selecting Facial Wash Products Based On Skin
Type Classification Using Cnn And Saw Methods)*

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ABSTRACT

Many people still experience difficulty identifying their skin type and choosing a facial soap product that suits their needs. Furthermore, the wide variety of facial soap products available on the market makes it difficult for users to choose the right product. This study aims to develop a decision support system for selecting facial wash products based on skin type. This system classifies facial skin types into three categories: normal skin, dry skin, and oily skin. The SAW method provide product recommendations based on product content, price, irritants, and texture. Test results show that the CNN model achieved 72% accuracy based on the Confusion Matrix. Expert validation results for skin type classification showed a validity level of 70%. Black Box Testing showed that all system features functioned well and were 100% valid. User Acceptance Testing (UAT) achieved a user acceptance level of 87.2%. The results indicate that the developed system is capable of assisting users in identifying skin types and choosing appropriate facial wash. Weighting.
Keywords: Decision Support System, Facial Wash, Convolutional Neural Network, EfficientNet-B0, Simple Additive Weighting.