

ABSTRACT

The problem of plastic waste in Bandung, West Java, is a serious concern, with daily waste production reaching 1,594.18 tons, of which 266.23 tons are plastic waste. In response to this situation, this study aims to design a workspace desk for 3D designers by utilizing plastic waste, particularly bottle caps, through the upcycling process. The resulting recycled plastic boards have unique characteristics and high aesthetic value, making them a viable alternative to conventional materials in furniture production. The research employs a qualitative method with a UserCentered Design (UCD) approach. The findings indicate that the designed desk not only meets the ergonomic and functional needs of 3D designers but also contributes to reducing plastic waste in the environment. Therefore, this research provides a sustainable solution that aligns with the productivity and aesthetic needs of a workspace

Keywords: *Work desk, Plastic bottle waste, upcycling, sheet press method*