

## Digitalization and Downstreaming of Sumatera Batik Motifs: Turtle Graphics as a Tool for Sustainable **Development**



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## **ABSTRACT**

The importance of preserving Sumatera batik motifs as cultural heritage is facing major challenges in the digital era. The problem of this research lies in the difficulties in digitalizing and commercializing batik motifs effectively and maintaining authenticity and cultural value. This article aims to explore the use of Turtle Graphics as a tool for digitalizing and downstreaming Sumatera batik motifs. The research method involves applying graphical programming to produce digital representations of batik motifs. One example of the batik motif used in this research is the Sirih Melayu batik motif. This batik motif often uses images of betel leaves that are intertwined and sticking out. The philosophical meaning of the betel leaf batik motif symbolizes a form of respect. Betel leaves are also important in tradition, especially at proposals, weddings, traditional title awards, and other events. The research results show that the Turtle Graphics can simplify digitalization. These solutions that not only contribute to the preservation and socialization of Sumatera batik, but also support the sustainability and popularization of batik in an increasingly digital global context.

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