

## **Abstract**

The problem that often arises in building a mobile-based application that is quite large is that there are too many classes that can cause developers to find it difficult to modify the related classes, especially at the maintenance stages of development. Nowadays, there are many frameworks for building reliable mobile-based software. One of the popular ones is Flutter which has a fast building principle and is very flexible, allowing applications to be quickly completed with any approach. In addition, Flutter also allows developers to build cross-platform applications with just one codebase. However, using Flutter alone is not fast enough to complete an application, a reliable architectural model approach is needed so that developers can streamline state management and reduce existing classes so that future development can be easily carried out. In this study, an architectural model will be built that can be used by Flutter-based mobile application developers using the MVI (model-view-intent) architectural approach with the Single Source of Truth principle. By applying the MVI concept to Flutter, it is hoped that developers can easily develop applications and at the next development stage developers can easily modify the program code. The research methodology was carried out by comparing the maintainability level of the architectural model built with the default model on Flutter using CK Metrics.

**Keywords:** : Flutter, MVI, *Maintanability*, *single source of truth*