## ABSTRACT

The dictionary is a tool that can help people to know and understand the local language. Batak language is one of the languages used in the province of North Sumatra to communicate and mingle with the community, especially in the South Tapanuli area. The more advanced the development of information technology, of course, cannot be separated from the role of smartphones in obtaining and managing information widely. The existence of an Android-based dictionary application will make it easier for users to translate languages without having to use a dictionary so that users are more efficient in using time. So this research aims to build an Indonesian – Batak language dictionary application based on previous research. The application was built using the Rapid Application Development (RAD) research method, and using the Java programming language with Android Studio tools, while the database processing side uses the SQLite database. This research was successful by obtaining a 100% assessment for functional suitability testing so as to get a Success/Success percentage, and a Very Good percentage with a percentage of 94.6% for usability testing from respondents referring to ISO 25010 system testing.

*Keywords: smartphone, android, Rapid Application Development, java, Android Studio, ISO 25010.*