

## Abstract

*Software testing* needs to be effective at finding any defects which are there, and there are many method that can be use to design test case. Not only effective, it should also be efficient, performing the tests as quickly and cheaply as possible, therefore, exist *testing* tools to automate *testing*.

Automating *software testing* can significantly reduce the effort required for adequate *testing*, or significantly increase the *testing* which can be done in limited time. Tests can be run in minutes that would take hours to run manually. There are tool to automate *testing* spesifically web based application, that can be run in a browser.

This book present analysis for two method aplicable for functional test level with Selenium tool, Cause-Effect graphing and State-Transition analysis, from implementation issue, and cost.

From the experiment, although each method has its own advantage over certain functionality, yet those methods able to model the same spesification without coverage loss, thus each can detect every defect which are there.

**Keywords:** *functional test, Selenium, Cause-Effect, State-Transition*