

## **E-complaint system for internal customer in Royal Malaysian Police Force using formal language method**

### **ABSTRACT**

The effectiveness to respond to customers' feedback also depends on an effective workflow. By having an effective method and workflow, the management can response immediately, hence improves the quality of services and facilities offered. The aim of this paper is to analyze the development of a complaint management system that uses formal language theory methodology. The E-Complaint System is been developed to use by the internal staff in the Royal Malaysian Police Force (PDRM). Before starting to develop the system, we try to model the system's flow using two type of method, i.e. the Deterministic Finite Automaton (DFA) and Non-deterministic Finite Automaton (NFA). The selected method to be used is the DFA, because it has a clear direction of each step. Among the function in the systems are Complaint Form, Review Complaint Status, Manage Complaint Process and the Email Form.

**Keyword:** Complaint management system; Deterministic finite automata; DFA; Non-deterministic finite automata; NFA