## A PREDICTIVE MODEL IN CLAIMS FOR GROUP HEALTH INSURANCE A CASE STUDY

## Lakmini Maheshika Ramanayake

A dissertation submitted in partial fulfillment of the requirement for Master of Science degree in Business Analytics

Department of Business

Informatics Institute of Technology, Sri Lanka
in collaboration with
Robert Gordon University, UK

## **ABSTRACT**

This thesis is on determining a robust model for the claims prediction in the OPD claims category of a Group Health policy by using a machine learning approach and to identify the contributing variables as well as patterns and trends in the data. The solution is built and tested on real life data obtained from the insurance company. The model development has taken both frequency of occurrence of a claim and severity of claims into consideration. Models were developed by using a combination of classification and regression techniques.