AN ONLINE SYSTEM TO ANALYSE PRODUCTION FAULTS

BY USING

PROCESS HISTORY DATA

A PROJECT REPORT PRESENTED BY

R.BAHIRATHAN

to the Board of Study in Statistics & Computer Science of the

POSTGRADUATE INSTITUTE OF SCIENCE

in partial fulfilment of the requirement
for the award of the degree of

MASTER OF SCIENCE IN COMPUTER SCIENCE

of the

UNIVERSITY OF PERADENIYA
SRI LANKA
2009

ii

Abstract

R.Bahirathan

Department of Computer Science

University of Peradeniya
Peradeniya
Sri Lanka

Improving the yield of production requires continuous monitoring of faults in the testing system and products. There is a need for nearly accurate method and a software system to identify the production faults. From such a software diagnosis system we can minimize the production loss in any production plant by taking necessary steps. Currently there are various computer aided fault detection techniques those are being used for identifying the faults in production plants; however these methods are very expensive because they use expensive devices to collect data. This report explains how an inexpensive online software system could be developed to find faults in chip testing adapters by using process history data. To verify this, the Software system was tested in online production for finding its efficiency and the results are fairly good.