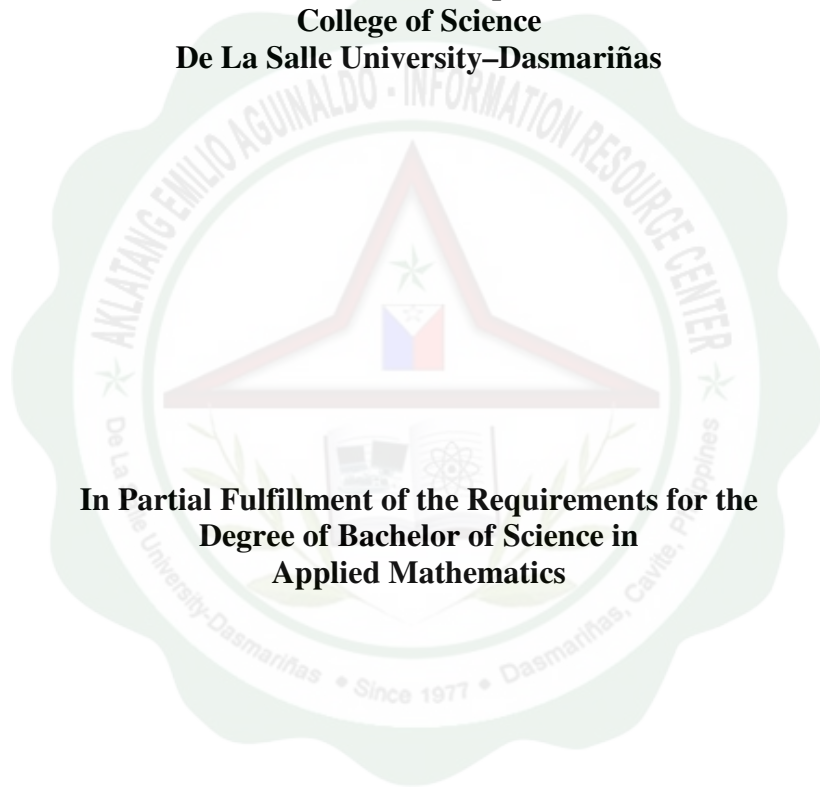




De La Salle University – Dasmariñas

**Statistical Process Monitoring Approach to the Marking and Demarking Process of the
JRD Systems Technology Incorporated**

**An Undergraduate Research Presented to
the Mathematics Department
College of Science
De La Salle University–Dasmariñas**



**In Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in
Applied Mathematics**

Paul Ivan M Cristobal

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ABSTRACT

A company especially in manufacturing firms does not attain success overnight. It should focus on its operations and processes within a time frame to meet the industry's standard. In order to seal its name in the national and global scale, quality control is essential. Statistical process monitoring is a quality control tool which enables a company to monitor and identify the causes of problems that may lead to failures in operations. Once these causes are identified, a company can assume relevant actions in diminishing these problems and in aiming for process improvement. This tool does not only give a company a higher profit but also a better flow and prediction within its procedures.

In manufacturing companies, rejects or defective items should be avoided and maintained in a minimal level so that profits are not affected. A high rate of reject could be caused by a factor contained within the operations of a company.

In an attempt to implement quality control in a company and to stress its importance to the manufacturing industry, this paper studied the operations of the JRD Systems Technology Incorporated, a semiconductor manufacturing industry located in Dasmariñas, Cavite, using Statistical Process Monitoring in order to identify the causes of problems within its operations and recommend corrective actions.

The study utilized historical daily reports and actual observation within a specified time interval for its data gathering and aimed to identify the behavior of the process and causes of problems within the manufacturing operations of the company. Using process monitoring tools like Quality Control Charts and Pareto Charts, the researcher was able to identify the causes and



accountability of the high rate of rejects, interpret them and construct a process monitoring system that can be used by the company for its process control plan and improvement.





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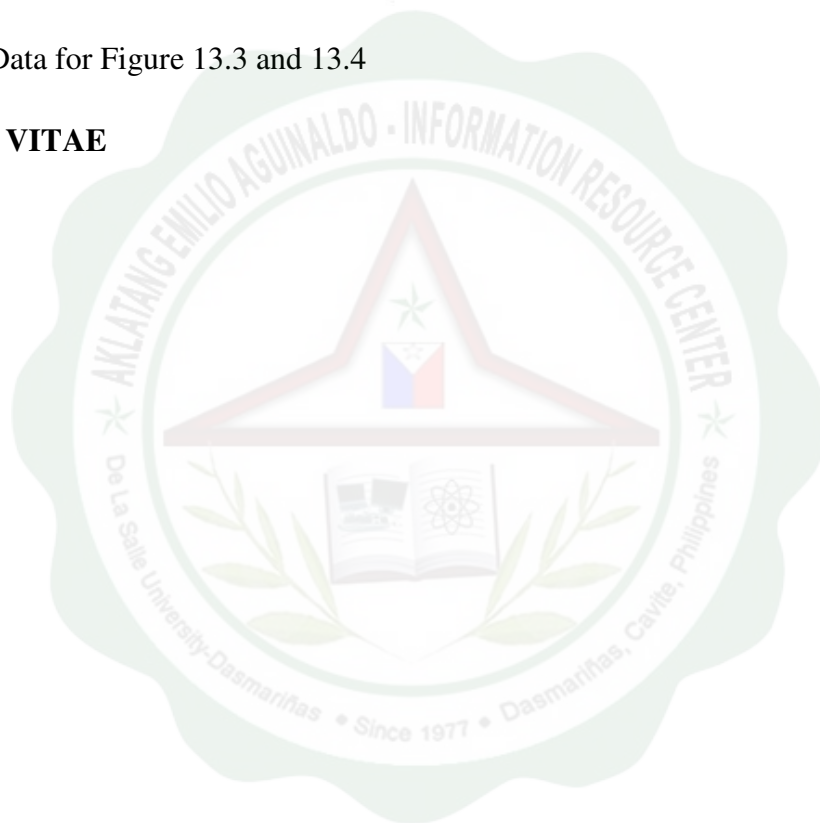
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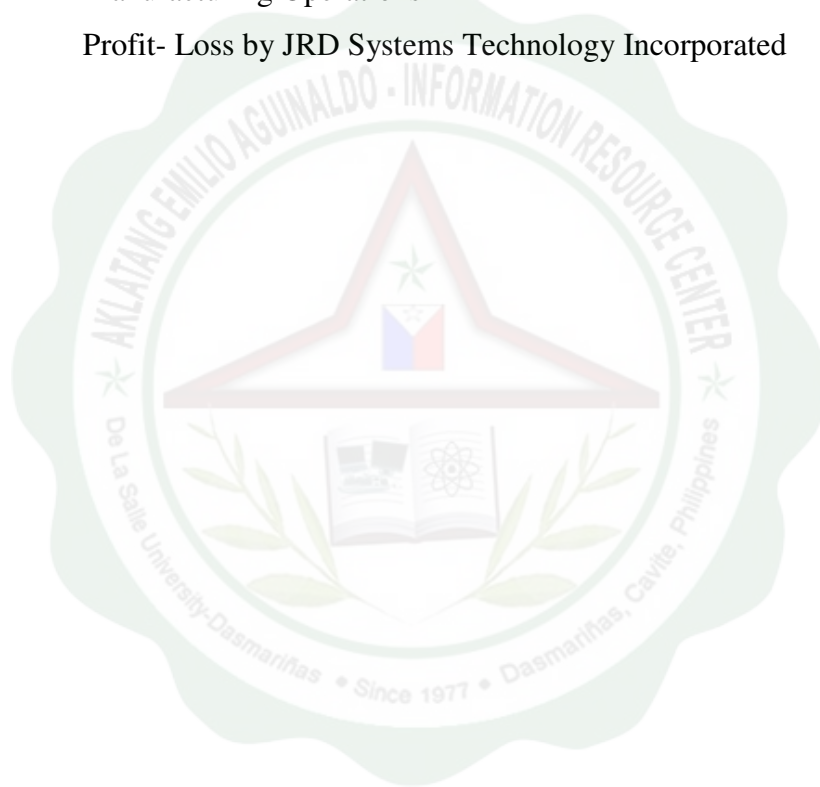


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