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STREAMLINING OF LANKA BULK DEPOTS' STOCK PLANNING

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Dissertation submitted to the Faculty of Information Technology, University of Moratuwa, Sri Lanka for the partial fulfillment of the requirements of the Master of Science in Information Technology.

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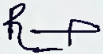
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Declaration

I hereby declare that the thesis submitted by me is based on original works carried out by me. Any reference to work done by any other person or institution or any material obtained from other sources have been duly cited and referenced. I further certify that the dissertation has not been submitted in any form for any other degree or diploma at any university or other institution of tertiary education.



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Date: 09.10.2016

I certify that the above particulars given are true and correct to the best of my knowledge.



.....
Mr. Saminda Premarathna

Supervisor

Date: 21/12/2016

Dedication

I dedicate my dissertation work to my family with a special feeling of appreciation to my loving mother who is the strength of my life.

Acknowledgement

I would like to extend my sincerest gratitude to all the persons who helped and supported me to get ahead with my research works.

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Abstract

Petroleum has been used since ancient times, and is now important across the society. As the world continues to industrialize rapidly, demand is increasing day by day. At the same time unit cost of petroleum products also increasing very frequently.

Even though CPSTL has been automated recently using SAP ERP system, stock planning has not been utilized yet. Therefore, delays in product delivery, over/under scheduling, lack of monitoring/ control mechanisms, damage of company prestige, creates windows for various malpractices/congestion, unnecessary costs incurred, improper utilization of resources is experiencing currently. As a result, CPSTL may lose its power of fuel storing and distribution.

These problems were brought up by many proposals, including the 'Chief Internal Audit' report in many occasions. Clearly, the stock planning for island wide LBDs' has to be addressed as a top priority issue, since it affects CPSTL as an organization.

To address the above issues, stock planning for the bulk depots can be improved by the utilization of ERP system. That is, the stock planning should be carried out while considering the storage capacities, available space, expected sales for the day and various other factors with respect to the depot. Bulk depots have to be replenished with respective materials while satisfying the demand without over scheduling.

I believe that, the stock planning for the bulk depots can be enhanced by the utilization of ERP system concerning the system took over as of now. This will improve operational efficiency, reduce information delays and errors, satisfy the island wide demand, speedup stock transfers, improve customer service and improve overall productivity.

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Abbreviation

CPC	Ceylon Petroleum Corporation
CPSTL	Ceylon Petroleum Storage Terminals Limited
EPR	Enterprises Resource Planning
LBD	Lanka Bulk Depots
IT	Information Technology
BTR	Bulk transfers
SAP	Systems Applications and Products in Data Processing
ERP	Enterprise Resource Planning
CRM	Customer Relationship Management
SD	Sales & Distribution
MM	Materials Management
FI	Finance Management
DEV	Development System
QAS	Quality Assurance System
PRD	Production System
ABAP	Advanced Business Application Programming
ALV	ABAP List Viewer
OOD	Object Oriented Design
OOA	Object Oriented Analysis
DM	Distribution Manager