



A MODEL OF EFFICIENT SMALL GROCERIES SHOP USING LEAN MANUFACTURING CONCEPT

This report is submitted in accordance with requirement of the Universiti Teknikal Malaysia Melaka (UTeM) for Bachelor Degree of Manufacturing Engineering (Hons.)

by

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I hereby, declared this report entitled “A Model of efficient Small Groceries Shop using Lean Manufacturing concept” is the result of my own research except as cited in references.

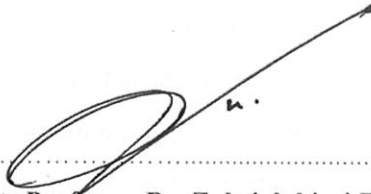
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APPROVAL

This report is submitted to the Faculty of Manufacturing Engineering of Universiti Teknikal Malaysia Melaka as a partial fulfilment of the requirement for Degree of Manufacturing Engineering (Hons). The member of the supervisory committee is as follow:



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ABSTRAK

Kebelakangan ini, konsep Lean Manufacturing telah menjadi pendekatan yang popular kerana ia bukan sahaja terpakai dalam industri pembuatan tetapi juga dalam sektor lain. Pengenalan kedai runcit rantaian dan kedai runcit atas talian dalam pasaran runcit telah memberi kesan yang signifikan ke atas kedai runcit kecil. Oleh itu, pemilik kedai runcit kecil mesti mengukuhkan keupayaan daya saing kedai agar dapat berdiri teguh dalam pasaran kompetitif ini. Walau bagaimanapun, kos kehilangan tersembunyi di kedai runcit kecil boleh mengurangkan margin keuntungan dan hal ini turut memberi kesan kepada kecekapan kedai runcit kecil. Oleh itu, projek ini bertujuan untuk meningkatkan kecekapan kedai runcit kecil. Objektif projek ini adalah untuk mengenal pasti masalah yang mempengaruhi kecekapan kedai runcit kecil melalui pemerhatian dan soal selidik. Kemudian, gambar rajah Ishikawa dan analisis Pareto digunakan untuk mengenal pasti dan menganalisis punca-punca yang menyebabkan masalah dalam kedai runcit tersebut. Selepas menganalisis dan mengetahui punca utama yang menyebabkan masalah tersebut, penyelesaian yang berkaitan dengan konsep Lean Manufacturing akan dicadangkan di kedai runcit kecil untuk mengatasi masalah yang dihadapi. 5S telah dicadangkan sebagai kaedah untuk menyelesaikan masalah tersebut.

ABSTRACT

In recent years, Lean Manufacturing concept has become a popular approach as it is not only applicable in manufacturing industry but also in other sectors. The introduction of chain retailers and online groceries store in the retail market has affected significantly on the small groceries shop. Hence, the owner of the small groceries shop must strengthen the shop's competitive capabilities in order to stand firm in this competitive market. However, the hidden loss cost in the small groceries shop may reduce the profit margin and consequently affect the efficiency of the small groceries shop. Thus, this project intends to improve the efficiency of the small groceries shop. The objectives of this project are to identify the common problem that affect the efficiency of the small groceries shop through observation and questionnaires. Then, Ishikawa diagram and Pareto analysis are used to identify and analyse the root causes that caused the common problem. After analysing and knowing the exact root causes that caused the common problem, a solution related to Lean manufacturing concept is proposed to the small groceries shop to overcome the common problem faced. 5S is proposed as the solution to solve the common problems that lead to the inefficiency in the small groceries shop.

DEDICATION

To my only
beloved father, Wang Swee Kim
appreciated mother, Lim Ah Gnoh
adored brother, Wang Kang Le
supportive sister, Wang Kang Mi
and all my helpful friends
for giving me so much supports physically, mentally, financially, full cooperation,
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Thank You So Much & Love You All Forever

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LIST OF ABBREVIATIONS

TMC	-	Toyota Motor Corporation
SME	-	Small Medium Enterprise
TPS	-	Toyota Production System
ISO	-	International Organization for Standardization
LE	-	Large Enterprise
JIT	-	Just in Time
CSF	-	Critical Success Factor
ASEAN	-	Association of Southeast Asian Nations
CPT	-	Central Place Theory
FIFO	-	First In First Out

LIST OF SYMBOLS

%	-	Percent
sq. ft	-	square feet

CHAPTER 1

INTRODUCTION

This project is set to introduce the study on a model of efficiency small groceries shop using Lean Manufacturing concept. Further investigation onto this study has been explained in the report organization.

1.1 Research Background

Early in the year of 2000, Malaysia was being bombarded with supermarkets and hypermarkets as many foreign and local store operator aggressively expanding several outlets across the country. These outlets provided a variety choice of products for the shoppers and it has certainly benefited many Malaysian families in term of shopping quality and daily needs.

However, there is a significant decline in numbers for large supermarkets due to the uprising of small groceries shop and convenience store like 7 eleven and Family mart. According to the Retail Group Malaysia, the decline of supermarkets and hypermarkets can be observed from the Malaysia's overall retail sales growth in the second quarter of 2019 as Malaysian shoppers nowadays prefer small groceries shop for daily groceries shopping and will only go to the supermarkets or hypermarkets for bulk purchases.