

THE DETERMINANTS OF LEAN IMPLEMENTATION TOWARDS
IMPROVEMENT OF PERFORMANCE IN HOTEL SERVICE INDUSTRY

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I hereby confirm that I have examined this project paper entitled:
The Determinants of Lean Implementation Towards Improvement of Performance in
Hotel Service Industry

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I declare this project is the result of my own research except as cited in the references. The research project has not been for any degree and is not concurrently submitted and in candidates for any other degree.

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DEDICATION

Specially dedicated to my father and mother, Leong Tuck Chuen and Yap Lay Teng,

Thank you for your fully support

Special thanks to my supervisor, Datin Suraya and my panel, Dr Mohd Fazli

Thank you for your guidance and advice

For all the encouragement, big thanks to all my dear friends

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ABSTRACT

Lean implementation involves several determinants to succeed in future and improve the performance. This study aims to discover the three main determinant of lean implementation towards improvement of performance in hotel service industry. Some factors have affected the rapid growth of business at certain level. Lean thinking implementation has its benefit towards successful outcomes. There are several determinants are identified for the result of research. Among these determinants, they include leadership of top management, behaviour of employee and organization culture. Th questionnaires were sent to every 5-star hotels to get the results of survey.

ABSTRAK

Implementasi lean melibatkan beberapa penentu untuk berjaya pada masa akan datang dan meningkatkan prestasi. Kajian ini bertujuan untuk menemui tiga penentu utama pelaksanaan perlahan terhadap peningkatan prestasi dalam industri perkhidmatan hotel. Sesetengah faktor telah mempengaruhi pertumbuhan pesat perniagaan pada tahap tertentu. Pelaksanaan pemikiran lean mempunyai manfaatnya terhadap hasil yang berjaya. Terdapat beberapa penentu yang dikenalpasti untuk hasil penyelidikan. Di antara penentu ini, mereka termasuk kepimpinan pengurusan puncak, tingkah laku budaya pekerja dan budaya organisasi. Semua kuesioner telah dihantar kepada setiap hotel 5 bintang untuk mendapatkan hasil tinjauan.

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CHAPTER 1

INTRODUCTION

1.1 Background of study

The belief about lean has developed at early 1950s and lean is defined as a systematic methodology to identify and withdraw waste thru continuous improvement by moving the product at the pull of the customer in pursuit of perfection. According to Womack and Jones (2010), lean thinking on the other hand is a business method that better value for customers withdrawing non-value adding activities. Lean involves understanding of continuously finding ways to reduce waste by applying lean tool and technique for customer satisfaction (Schiele and McCue,2011). Lean thinking starts with the customer followed by the value. Lean is the well-known business performance improvement methods of the last decade as well. (Peters, 2010).

Lean implementation has successful result in manufacturing sector and many companies starts to adopt lean concept and principle into their daily work flow towards the successful performance of business. However, lean has managed to move from primary state in production to service companies (Swank,2003; Abdi et al,2006; Pierchy and Rich,2009).

Thus, service industries gain a lot of advantages by applying lean methodology to improve quality and reduce waste. Everyone knows lean manufacturing more compared to lean service which is a new idea (Hadid and Mansouri, 2014). Handid and Mansouri (2014, p.9) points out that “lean service means the implementation of lean manufacturing practices in services and it was formally introduced into the literature by Bowen and Youngdahl (1998) with a growing interest among academics and practitioners.” Nascimento & Francischini (2004) notes that definition of lean service as a system of service process which consist of activities that create value for customers, centering on express tangibles and intends for quality and price under customers’ anticipation. Although lean thinking is originated from manufacturing sector and transferred globally, with the Toyota Production system (TPS), many service companies implement lean practice appropriate.

Next, a success stories of company which adapt the lean approach into their business. Lean has set up a milestone to improve performance through elimination of waste. For example, Dropbox has changed their product to what customers really want. By using lean start up principle, Dropbox owned from 100,000 registered users to over 4,000,000. Numerous studies concluded that Lean can help business process towards its improvement in performance no matter in what industries.

However, implementation of lean towards improvement of performance has faced big challenges while the problems of people related behaviours occur. The people related behaviour will affect the lean-performance. For example, organisational culture, behaviour of employees and leadership of top management. These factors will make further discussion in later chapter.

1.2 Research Problem

The study is undertaken to understand the determinants of lean implementation because some companies in hotel service industry do not know how to implement lean in their daily business management. Some hotel companies have achieved profitable result and continued to grow and move up the ladder to adapt customer-driven market. However, other still struggle because of their deficiency of understanding about lean. Some top management of companies do not realize the importance and benefit of lean thinking such as lead time, zero breakdown, zero defects and so on. This will affect future of company if lean thinking is not applied properly. Meanwhile people related behaviours are the main issue in implementing lean in a successful way. Benton and Shin (1998) mentioned that the cultural, human, and geographical factors are the main lean implementation problems. The research will examine the factors of lean implementation that leading to the improvement of performance in hotel service industry.

1.3 Research Question (s)

- What is the understanding of lean implementation?
- What is the importance of lean implementation towards improvement of performance?
- What are the determinants of lean implementation that affects improvement of performance?

1.4 Research Objective (s)

- To distinguish the understanding of lean implementation.
- To examine the importance of lean implementation towards improvement of performance.
- To identify the determinants of lean implementation that affects improvement of performance.

1.5 Scope of study

The study focuses on determinants of lean implementation that lead to the improvement and performance in service industry. This study is carried out in Malaysia. This research aims to find out the how importance of factor can affect the performance because lean thinking concentrates in value-adding processes and help companies to survive for the long-term. Hotel managers will be covered as part of respondents and hotel which have applied lean thinking in their daily business. In addition, the data also will be collected by allocating questionnaires among service companies.

1.6 Limitation of research

The focus of this section on service companies around Malaysia which have implemented lean. The list of service companies can be found in the website Some hurdles encountered in conducting this research are time limitation of compelling the research, number of respondents and the data obtained may be biased.

1.6.1 Time constraint finishing the research

A best research required much time to complete perfectly. However, this study is a research project for student, researchers or students involved were given one year as provided by university. It will be better if it is being done in extended period.

1.6.2 Number of respondents

To establish the research, a good questionnaire must be determining and prepared at early time. Studies conducted on service companies which implemented lean as their business method. However, it is difficult to identify whether respondents that held in the

companies have their functional involvement in the lean implementation process or not. Respondents are hard to find because most respondents might ignore to fill up the distributed questionnaire.

1.6.3 The data obtained may be biased

Individual views may be give bias while answering the questionnaire. It is a systematic error and it will affect the findings and conclusion.

1.7 Summary

This chapter introduces the background of study, problem statement, formation of research questions and research objectives and scope of study as well. Chapter 1 has explained the importance of lean implementation that guide to improvement of performance and the literature review that related lean implementation will be further discussed in chapter 2.

CHAPTER 2

LITERATURE REVIEW

2.1 What is Lean?

Womack and Jones (2003) states that “the central tenet of lean is to maximise value provided to the customers while minimising waste.” According to Clark, Silvester and Knowles (2013,p638), lean is defined as” based on the principle that the purpose of any companies is to create value for the people it serves (its users or customers).” Lean aims to add value to the product and reduce cycle time. Lean’s multiple focus on increasing business value and reducing the waste and it was the well-known business performance improvement methods of the last decade (Peters 2010). Thus, lean is quite important to make sure the sustainability occur until further time.

2.2 History of Lean

In 1950's, the Lean concept originated from the Japanese car industry, Toyota Production System (TPS). introduces a management philosophy that mainly applied in manufacturing and it is called Lean Manufacturing. After World War II, Toyota was closely bankrupt and due to crisis of economic. The post war demand was low and the cost per unit is reduced through economic of scale was inappropriate. This situation led to the development of demand-led pull system. The father of the lean system is Taiichi Ohno, a manufacturing engineer. Sakichi Toyoda, who then worked in textile industry, in case of breaking off the thread he invented a motor-driven hang with a specialized mechanism to block. (Lean.org n.d.). The specialized mechanism became later a foundation for Jidoka(automatization with human manufacturing), one of the two main pillars on which Toyota Production System was built. Due to the application of a fault detection sensor, the defects stemming from human-related imperfections were reduced and the production capacity was elevated. Sakichi Toyoda visited the United States for the first time and realized that the new automotive period was beginning. In 1929 Kiichiro Toyoda arrived in the USA with the aim of scrutinizing the local companies in the automotive industry. He was particularly fascinated with the Ford production system, which in 1913 introduced the serial production of its automobile (the T model) Consequently, when *Toyota Motor Company* initiated their production, Kiichiro decided to implement some of the resolutions he had witnessed in the USA. The then Japan suffered from reduced demand, therefore diverse automobiles were necessarily produced in smaller numbers on the same assembly lines. To compete in the mass production automotive industry, which had already been introduced in companies of European and American, Toyota changed the methods of production. Kiichiro Toyoda fully understood the fact that it was mandatory to create a fast and flexible process of production because of which the clients would obtain desired, high-quality and reasonably-priced automobiles. Kiichiro commenced preparatory work

to produce in the Just-in-time system. The objective of the latter was to elevate the production capacity and reduce waste painstakingly. In the 1950s Sakichi's son, Eiji Toyoda, visited the Ford company. It seems that owing to the visit Toyoda together with Taiichi Ohno can create a system linking the two pillars of the TPS (Jidoka and Just-in-time) with the Ford assembly line. Shortly after the previous improvement Taiichi Ohno advanced another concept called "pull-flow production", an old practice in American supermarkets. The pull-flow production allowed to generate as many products as could be exploited in the successive process. In turn, the reduction of overproduction would be facilitated. The Toyota Production System did not arouse interest in Japanese and American companies by 1973. Lean.org. (2017) states that As Kiichiro Toyoda, Taiichi Ohno, and others at Toyota looked at this situation in the 1930s, and more intensely just after World War II, it occurred to them that a series of simple innovations might make it more possible to provide both continuity in process flow and a wide variety in product offerings. They therefore Ford's original thinking was revisited, and the Toyota Production System is created.

The focus of the manufacturing engineer was shifted by this system from individual machines and their utilization, to the flow of the product via the total process. Toyota concluded that by right-sizing machines for the correct volume needed, introducing self-monitoring machines to ensure quality, lining the machines up in process sequence, pioneering quick setups so each machine could make small volumes of many part numbers, and having each process step notify the previous step of its current needs for materials, it would be possible to obtain low cost, high variety, high quality, and very fast throughout times to respond to changing customer desires. The information management could be made not complicated and more accurate. (Lean.org. n.d.)

2.3 Principle of lean

According to Womack & Jones (2003), there are five principles of lean manufacturing, they are specifying value, value stream mapping, making value flow, pull production system and striving for perfection or continuous improvement. The five principles are for implementation of lean.

- Specify value from the standpoint of the end customer by product family. Value can only be defined by final customers
- Value stream is the actions that needed to bring a merchandise from raw material to hands of client.
- Make the value-creating steps occur in tight sequence so the product will flow smoothly toward the customer.
- During the flows, value is pulled by customers from the next upstream activity. Product should flow through a lean organisation at a rate that customer need them without caught up in inventory level.
- As value is specified, value streams are identified, wasted steps are eliminated, and , begin the process again and continue it until reach a mode of perfection is reached in which perfect value is created with no waste. Perfection does not mean quality. It means producing exactly what customers request, what customer requires, at a fair price with minimum waste.