

SHEFFIELD  
CONSULTING

Practical Workshop at  
Clipsal Plant  
Taiichi Ohno's Spirit of  
Toyota Production System  
( Lean Manufacturing )

- A Workshop that inspired by Norman Bodek  
Date: 22 & 23 April 09



Another TPS Program by Sheffield Consulting with



## Introduction



Toyota Production System (TPS) or Lean Manufacturing is a famous Production System established by Taiichi Ohno since 1940s. The system was inspired by the Kiichiro Toyoda, the founder of Toyota Motor Corporation since 1937 and the father, Sakichi Toyoda who invented the world 1<sup>st</sup> non-stop

shuttle change type Toyoda automatic loom (Type G).

***...August 15, 1945 was the day Japan lost the war; it also marked a new beginning for Toyota. Toyota Kiichiro (1894-1952), then president of the Toyota Motor Company, said, "Catch up with America in three years, otherwise the automotive industry in Japan will not survive."***

***Taiichi Ohno***

This was how Toyota Production System being initiated and also the only way to enable Toyota to leave independently with little government production (Automotive Industry was protected almost 13 years at that time from 1936-1949).

***When we apply the cost principles profit + actual cost = selling price, we make the consumer***

***responsible for every cost. This principle has no place in today's competitive automotive industry. ..At Toyota, as in all manufacturing industries, profit can be obtained only by reducing costs..***

***Taiichi Ohno***

How many of us are still applying this typical formulation when determining the selling price? **Tata, India** recognized what Ohno's said and this is how **Tata's Nano** can be sold in only USD2500 (the cheapest car in the world). **Tata** determined first the selling price, then find way to reduce the cost in order to maximize the profit.



***... I strongly believe that "necessity is the mother of invention". Improvement at Toyota plants are made based on need. The key to progress in production improvement, I feel, is letting the plant people feel the need..***

***Taiichi Ohno***

Many of us are blindly follows what others are doing or fulfilling what the Management's has set as milestone in implementing TPS or Lean Manufacturing. However, do we or our workers really feel the needs in implementing the System? Why many TPS or Lean Projects get start easily but can't really sustain for long term?

## Why Toyota Loss??

Why Toyota experienced loss in the first 70 years? If Toyota follows strictly to Toyota Production System or just in time concept, there is no way Toyota will loss and make blame to the **appreciation of yen and slow in demand**. Does Toyota really following what Ohno has teach or their **Toyota Production System** is just a brand name for all instead of System strictly to be followed?

If Toyota followed **just in time** concept, means no production if there is no customer order. If there is no production, unlikely there is loss due to overstock.

If Toyota practicing **kanban** system, means no order to suppliers if there is no production triggered. In other words, unlikely loss can be occurred due to over purchase.

**TIMES ONLINE**

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From The Times  
February 5, 2009

### Plunging sales put Toyota on road to worst results in 70-year history

The combination of a strong yen and falling demand have left Toyota showrooms empty in markets worldwide

**TIMES RECOMMENDS**

- > Banks to add £1.5 trillion to public debt
- > Mortgage lending falls to new low in January
- > BAE pays £500m to top up plunging pension pot

SHARE	100	200	300	400	500	600	700	800	900	1000
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3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
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If Toyota follows **poka yoke** (machine with human intelligent) system, means possible error can be foreseen and prevented. Again, unlikely there was so much market recall.

If Toyota follows **heijunka** and multi-skill operation system, means production will be planned based on small lot with various models offered. Therefore, there is unlike a loss due to excessive of labor.

There are so many **if.... But** does Toyota realized what they have done or will Ohno feels upset if he knew Toyota suffered loss in 70 years history.

## Workshop Objectives

Therefore, we will take this opportunity to discuss and discover why Toyota Loss even so called practicing Toyota Production System or Lean Manufacturing.

This is not a typical TPS / Lean Manufacturing Training but an opportunity for all to read what Ohno's advices in practicing TPS / Lean Manufacturing System. At the end of the course, participant should be able :

- To understand the origin and real spirit of Lean Manufacturing – Toyota Production System
- To share why Toyota Loss first time in 70 years
- To learn from Ohno's experiences in practicing TPS / Lean Manufacturing

- To read Ohno's advices in practicing Lean Manufacturing.
- To apply appropriate techniques to improve the process and operation.

In addition, we have a chance to **listen** and **visit** to **Clipsal** (now called as Schneider) Plant Shah Alam, a famous Lean Company and listen to his Lean Practitioner in sharing the lean experiences and advices. Meanwhile, we can take this opportunity to learn in depth and technically to the **Poka Yoke** solution offered by **OMRON**.

### Clipsal



1907 Alfred E Gerard

Established since 1980, Clipsal (Malaysia) Sdn Bhd is the sales and marketing arm of Clipsal Group. It distributes "CLIPSAL" range of products in Malaysia. Clipsal Group is principally engaged in the manufacture and distribution of electrical wiring devices and installation systems (EWDIS) in Asia. It has a significant presence across Asia, with manufacturing operations in China, Malaysia, Indonesia and Vietnam and a sales network covering more than 15 countries in Asia. It is the sole and exclusive manufacturer and distributor of EWDIS

products under the "CLIPSAL" brand in 31 countries in Asia.

Omron Industrial Automation has been present in Malaysia for more than 25 years. Omron Electronics Sdn Bhd offers sales and distribution of industrial automation components together with engineering services that includes Industrial Devices & Electronics and Mechanics Components, Auto Identifications and Systems, Factory Automation System, Sensing Devices and Integrated Poke Yoke (Error Proofing) Solution.



### Omron



## Program

### Day 1

Taiichi Ohno

Everything started from the NEEDS, so do TPS

- The oil crisis opened our eyes
- Slow growth is scary and catch up with American

Give Machine an intelligence

The power of Individual Skill and Teamwork

Cost Reduction is a Goal – Non Cost Principle

The Evolution of Toyota Production System

- Sakichi Toyoda and ask 5 times Why
- Complete Analysis of Waste

Plant- First principle – Gemba Walk

***Exclusive Sharing Section by Clipsal on Lean Manufacturing System and plant visit to Clipsal.***

### Day 2

Writing the standard worksheet yourself

The skill of passing the baton

Establishing a Production Flow, a basic condition

Production Leveling – Mountain should be low and valleys should be shallow

Use your authority to encourage them

Learning from unyielding spirit

Raising productivity during low growth

An autonomous nervous system in Business Organization

Provide information when needed

The tortoise and the hare

Take good care of old equipment

***Exclusive review of OMRON's Poka-Yoke Solution and Overall Equipment Efficiency monitoring system***

## Workshop Leader

### **Mick Ng – Sheffield Consulting Groups**

Mr. Mick Ng holds an Master of Engineering in Manufacturing Management. He is a TPS and Lean Practitioner and assists companies in reducing wastes and smoothen production flow.

He is specialized in Toyota Production System and Lean Manufacturing that inspired under Taiichi Ohno, Shingo Shigeo and Norman Bodek's teaching. He works closely with International Lean Guru such as Norman Bodek and Organization such as Institute Lean Institute (US), Japan Management Corporation (JAPAN), Japan Institute Plant Management (Japan), Pascal Corporation (Thailand), OMRON (Malaysia) for various seminars and workshops,

He is also a Malaysia Productivity Corporation (MPC) registered trainer and have conducted various courses relates to TPS / Lean Manufacturing such as Single Minutes Exchanges Dies (SMED), Kanban, Production Leveling (*Heijunka*) and so on.

### **Looi Tuck Hong – Omron Electronics Sdn Bhd**

Mr. Looi Tuck Hong is currently the Factory Automation Application Specialist in Engineering and Solution Sales Section, and has been in Omron Electronics Sdn Bhd for the past Ten years handling the sensomatic products portfolio. He has a total of twelve years experience in Industrial Automation.

With his experience as the system configuration consultant, product development and industrial automation specialist. His

skill, abilities and affinity for cutting-edge technology have won him accolades. His fields of expertise include application of RFID products and offering solution to help save your company time and money by improving forecasting, distribution, production, and preventing internal loss. Successful implemented solutions include “Work In Progress” Tracking System in manufacturing, Tooling Management, Machinery Monitoring system and Warehouse Management System.

Mr. Looi is a graduate member of The Institution of Engineers and Board of Engineering Malaysia (IEM/BEM), holding a MBA Postgraduate Master Degree from University of South Australia, Australia. He was the committee member for the Malaysian Communications and Multimedia Commission (MCMC) Working Group 2.3 that draft the RFID UHF Spectrum Regulation of 919~923Mhz for the country.

### **Workshop Fee**

Claimable under HRDF/SBL Scheme

Participant/s	Normal Rate	Early Bird (Before 10 April 09)
1 pax	RM 1380/person	RM 1180/person
2 or more	RM 1180/person	RM 1080/person

### **Registration Form**

Name	Designation

#### **Name & Address or Company Stamp**

**Contact Person:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Tel No:** \_\_\_\_\_ **Fax No:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_

Registration can be made by fax to 03-78801595

Payment shall be made payable to:

**Sheffield Consulting Groups Sdn Bhd**

(Course fee includes refreshments, lunch, course material and Certificate of Attendance)

