



WMA Starts the process with Philosophy.....





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Initiatives

Waste Management Associates (WMA)

Process are improved by Eliminating Waste

Waste Management Associates (WMA) was formed in 2001 in order to meet the growing interest in the Toyota Production System (TPS), which is also referred as Lean Manufacturing. The primary objective of WMA is to support manufacturers who have a desire to implement the Toyota Production System in their company.









Mr. Dammika Perera, Founder and Managing Director of WMA is a certified Lean Manufacturing System Consultant. He is a professionally trained trainer to train the trainees and to implement the system. His rich practical experience in the professional field is added value to the system implementation.

Along with him there is a professionals and experts team dedicated to training and implementation of Lean Management practices based on the Toyota Production System. WMA delivers rapid results and it builds operational team's capabilities to make persistent improvement a reality.

Lean Manufacturing definition has given many forms according to the views of authors and practitioners. It is obvious that a system like Lean Manufacturing cannot be explained with a single sentence. We the WMA understands the Lean Manufacturing as a system which aims in elimination of the waste from the system with a systematic and continuous approach. Lean Management is based on developing people who are problem solvers focused on serving customers and improving performance through waste elimination. The Toyota Production System (TPS), which is better understood as the Thinking People System or simply the Toyota way, enables operational excellence by creating an organization that values and respects people and their creative abilities.

WMA team is well equipped with Lean Tools such as

-  6S (Workplace Management with Safety)
-  Value Stream Mapping (Learning to see the Process)
-  Kanban and Supermarket (Pull System)
-  Six Sigma (Quality Improvement and Measurement)
-  SMED (For Changeover Time Reduction)
-  OEE (To Calculate Quality Productivity)

What separates WMA from other lean consulting and training organizations is that WMA provides training, ensures the implementation, shows the result and helps the management to sustain the implemented lean practices through SOPs.

Range of Services

Lean Manufacturing Assessments, Training, Implementation and Sustainability

Training and Implementation of

Lean Production System

Traffic Light System

Lean Industrial Engineering

Product Safety & Compliance

Supply Chain Management

CT-PAT

Brand Protection



Training, Implementation & Certificate Course in

Industrial 6S (Work Place Management)

4 Point System (Fabric Quality Inspection)



Lean Production System



Lean Production System is a social-technical, cultural and people-oriented strategy. It increases profit by reducing Defects, Re-work, Scrap and Waste, Inspection and Inconsistent Results. It increases revenue by raising Throughput, Capacity, Quality, Customer Satisfaction and Efficiency. **WMA** helps to implement Lean Production System in a Toyota Way.

Traffic Light System



Traffic Light System (TLS) is a Visual Management Technique designed to create control on quality issues during production process. Its a method of highlighting attention where is it needed and avoiding attention where it is not needed on the factory shop floor. **WMA** helps you to establish TLS in your production process to ensure the quality requirement.

Lean Industrial Engineering



Lean Industrial engineering deals with the concerned with the development, improvement, implementation and evaluation of integrated systems of people, money, knowledge, information, equipment, energy, materials, analysis and synthesis with the principles and methods of engineering in a lean way. **WMA** helps in Lean Industrial Engineering.

Product Safety & Compliance

Brand Protection



Well-known and famous brands are a target for illegal activities such as counterfeiting, diversion and other intellectual property rights violations. These activities affect the Brands. Customers are misled into believing that they are acquiring genuine goods. When consumers are deceived into buying falsely labelled goods, products that don't meet the quality standards will taint Brand reputation in the minds of consumers who encounter these inferior goods.

These fraudulent actions degrade and dilute the Brands Integrity. Protecting products against these activities is one of major concerns for every Brand Vendor. **WMA** helps you to protect your brands in a systematic and professional way.

Certification Course

Industrial 6S (Work Place Mgt)



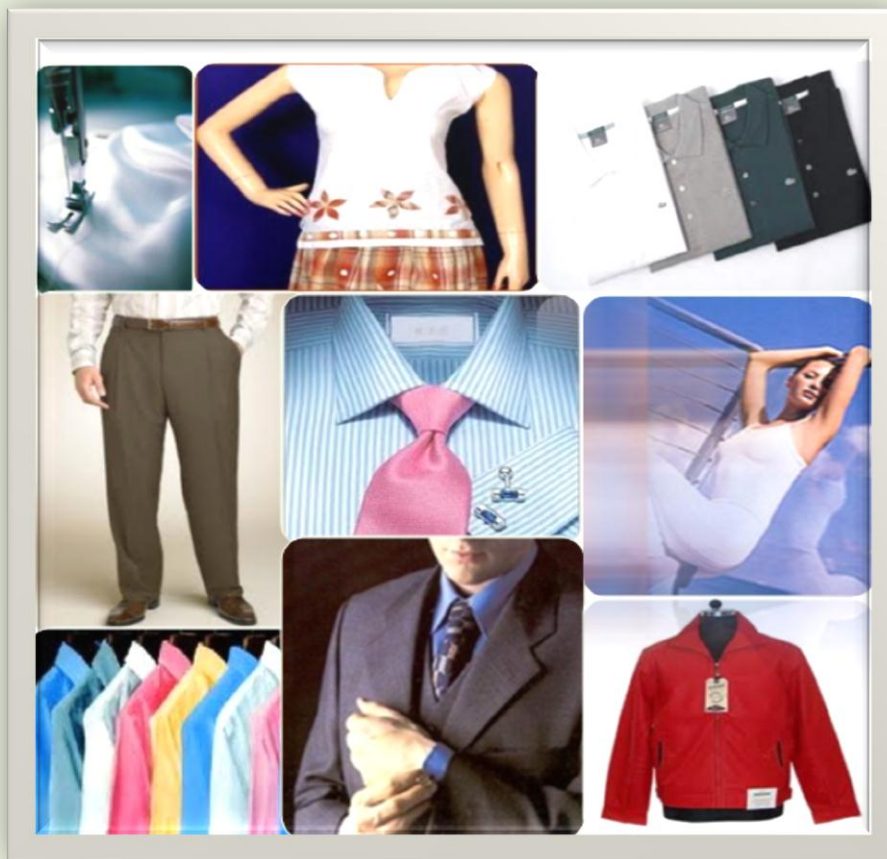
5S is the name of a workplace organization methodology that uses a list of five Japanese words which are Seiri, Seiton, Seiso, Seiketsu and Shitsuke. Transliterated or translated into English, they all start with the letter "S". The list describes how items are stored and how the new order is maintained. The decision-making process usually comes from a dialogue about standardization which builds a clear understanding among employees of how work should be done.

It also instills ownership of the process in each employee. **WMA** helps to implement and sustain the 5S industrial Work Place Management System with 6th S i.e. Safety at work place.

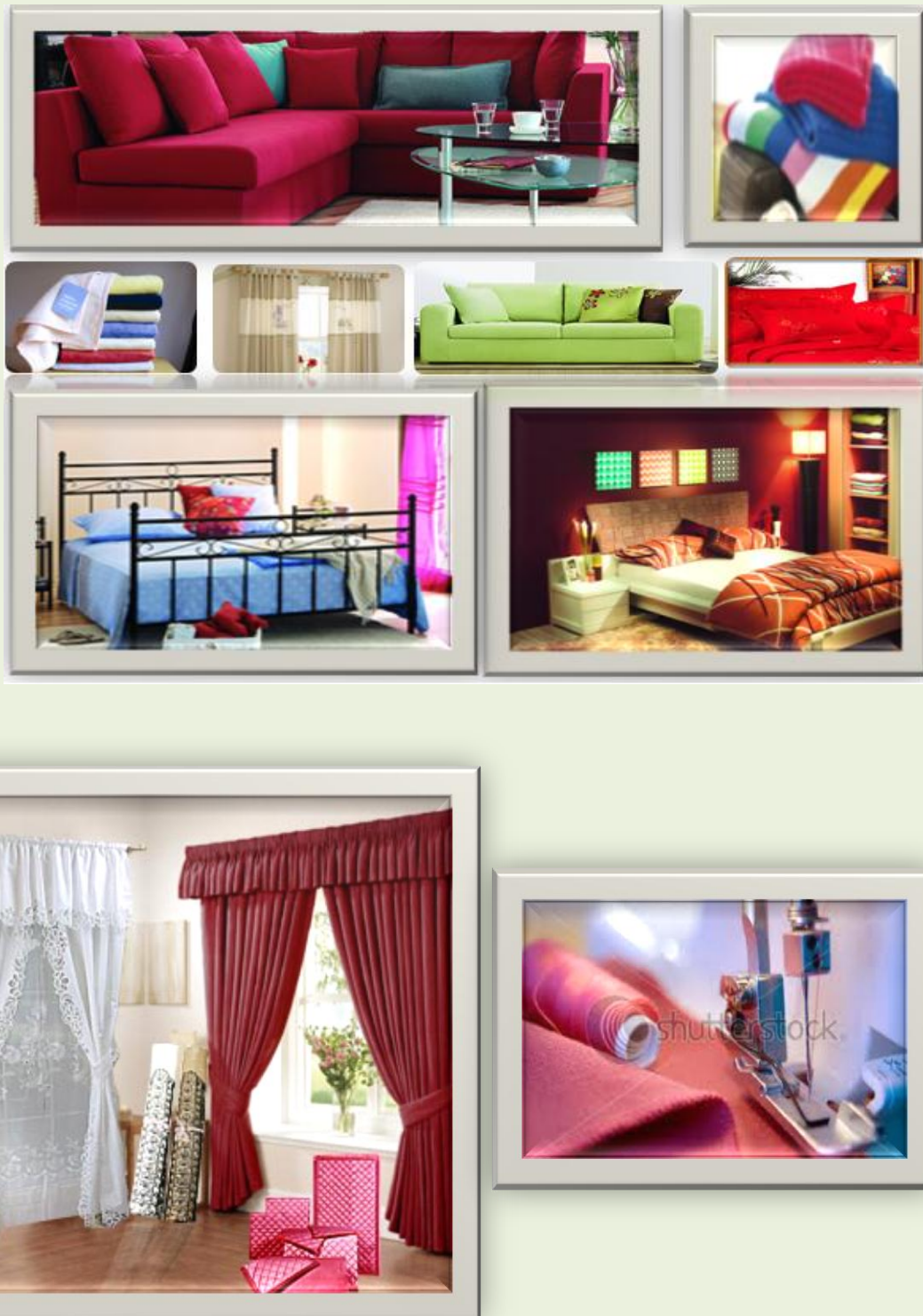
4 Point System (Fabric Quality)

There are many methods to inspect the quality of fabric. 4 point Fabric Inspection System is a one of the set of procedures followed for detecting fabric defects. Through this, fabric related quality problems can be avoided before it is put into production. **WMA** provides intensive training on 4 Point Fabric Inspection System.

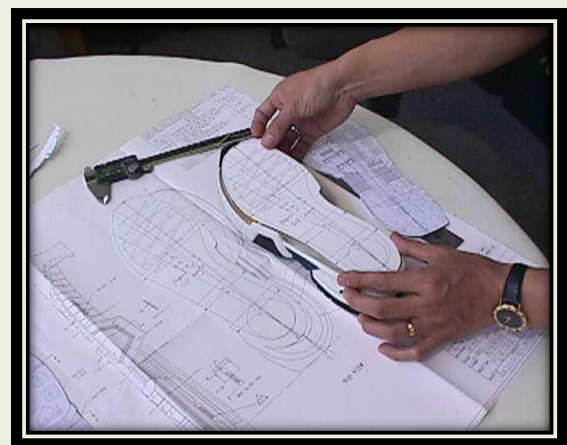
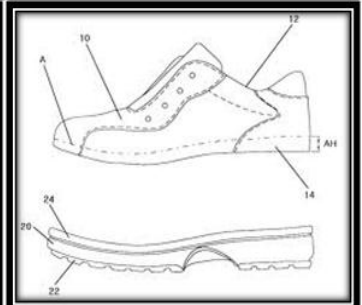
WMA and *Garment Manufacturing Industry*



WMA and Home Furnishing Industry



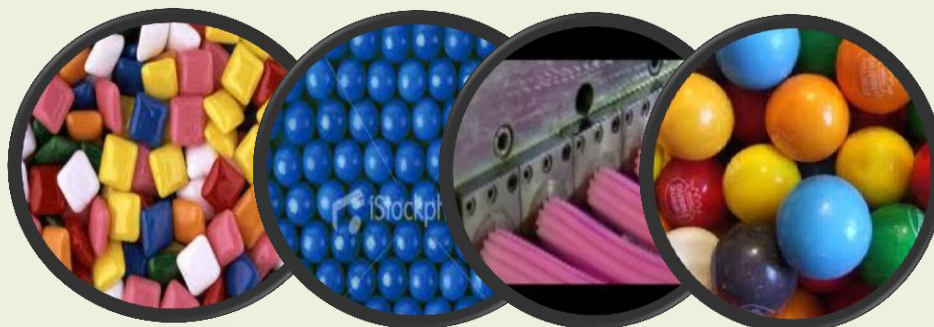
WMA and Footwear Manufacturing Industry



WMA and Toys Manufacturing Industry

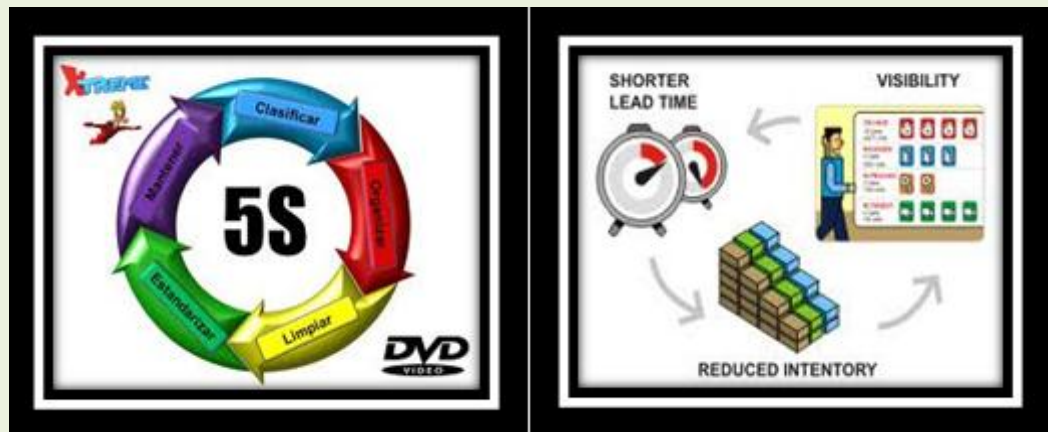


WMA and Food Processing Industry



Lean Tools

Lean is the set of tools that assist in the identification and steady elimination of waste. Lean emphasis the learning by doing approach, where the members of a process improvement team are those most closely associated with adding value to the product. The whole process is based on designing customer value, focusing on the value stream, making value flow and letting customers determine the product of service they want, with a relentless pursuit of perfection in a timely manner at an appropriate price. Lean tools are latest innovative methods that have come-up with a view of providing people with more options of achieving efficiency at work. There are many lean tools at present and each of them specialized in making productivity high in a particular field.



6S (Workplace Management with Safety)

We consider 6S to be the foundation of Lean Manufacturing systems. 6S is workplace organizational tool that provides the necessary groundwork for workplace improvement. 6S ensures that there is a place for everything and that everything is in its place—clean and ready to use. 6S Improves safety, Decreases down time, Raises employee morale, Identifies problem more quickly, Develops control through visibility, Establishes convenient work practices, Increases product and process quality, Strengthens employees' pride in their work, Promotes stronger communication among staff, Empowers employees to sustain their work area.

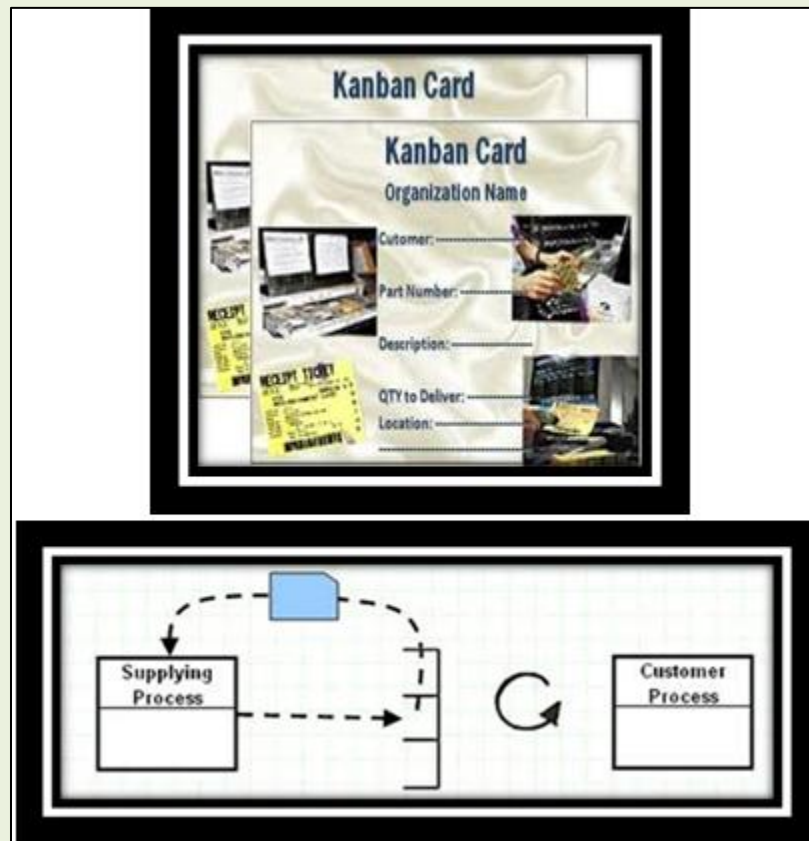
Value Steam Mapping (Learning to see the Process)

Value Stream Map is a pictorial representation of the flow of material and information from raw material to finished product. The steps involved in the process are Identifying Present flow, Draw the Current-State Map, Identify the Continuous Flow (value-added, non-value-added and necessary non-value-added) draw the Future-State Map by using Kanban System/ Supermarket, Heijunka / Level Production, workout strategies /plans for achievement of desired future plan.

Kanban and Supermarket (Pull System):

Kanban means many things. Literally, Kanban is a Japanese word that means "visual card". At Toyota, Kanban is the term used for the visual & physical signaling system that ties together the whole Lean Production system. It is a communications tool in the 'just-in-time' production and control system. A Kanban, or signboard, is attached to specific parts in a production line signifying the delivery of a given quantity. Benefits: Bottlenecks become clearly visible in real-time. This leads people to collaborate to optimize the whole value chain rather than just their part.

In lean manufacturing terms, a supermarket is a tightly managed amount of inventory within the value stream to allow for a pull system. Supermarkets, often called inventory buffers, can contain either finished items or work-in-process. They are used to handle finished goods inventories being replenished from a continuous flow pacemaker process, between a continuous flow process and other manufacturing processes that are shared by other value streams and for incoming parts and material being pulled from supplier locations. Supermarket provides right material at a right time in right quantity with a right quality.



Six Sigma (Quality Improvement and Measurement):

Six Sigma is a management methodology employed to improve processes and products in manufacturing and service organizations. It focuses on reducing variation in a business process, while targeting problem areas with pinpoint accuracy. Unlike other process improvement “programs,” Six Sigma enhances process predictability while reshaping the organizational culture to meet customer demands. It provides a common language to gauge performance across all functions and divisions of an organization. Six Sigma is a statistical term that equates to 3.4 defects per one million opportunities. Six Sigma can achieve dramatic improvement in business performance through a precise understanding of customer requirements and the elimination of defects from existing processes, products and services.



SMED (For Changeover Time Reduction):

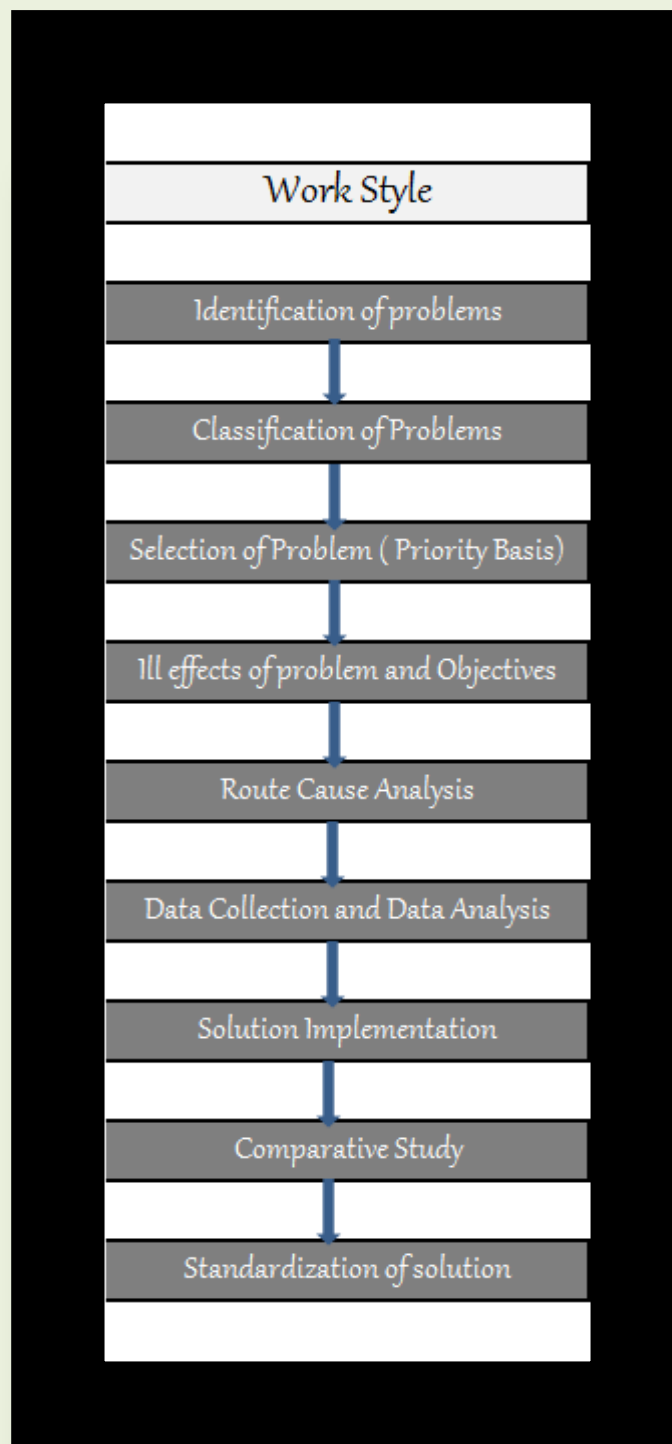
Single Minute Exchange of Dye (SMED) is a process used to continually reduce the set-up and changeover times. It is the time elapsed between the last good piece off one production run and the first good piece off the next run within the plant operations. Improves the inventory levels. THE SMED Reduces the lead time- Helps achieve continuous flow.

OEE-Operational Equipment Efficiency OEE (To Calculate Quality Productivity):

Overall Equipment Efficiency is the common machinery and process metric utilized through a lean manufacturing initiative. The OEE concept normally measures the effectiveness of a machine center or process line, but can be utilized in non-manufacturing operations also.

Problems are opportunities...

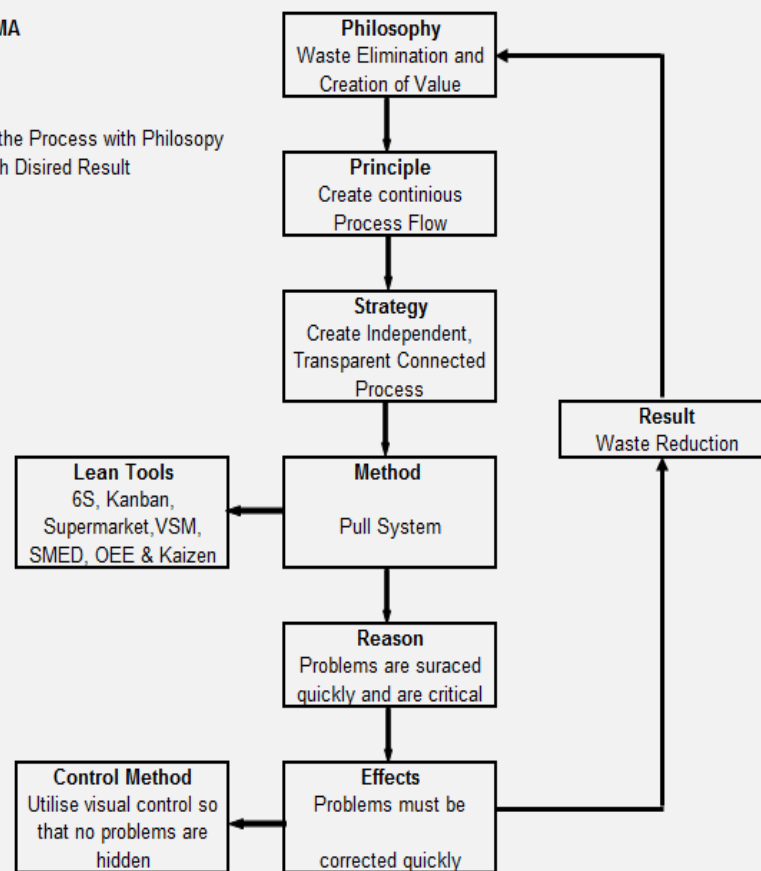
WMA Considers problem as an opportunity for development. By solving the problem opportunity for development increases.



WMA Starts the Process

Lean and WMA

WMA Starts the Process with Philosophy
And Ends with Disired Result





Now it is your term to THINK about “Your Challenges and Our Solutions”



If you need a competitive weapon that reduces your cost, improves quality and improves your bottom line.....

If you want to compete against off shore competition.....

If you want to do MORE with less Time, less Inventory, less Space, less Investment and Right the First Time.....

Then Think About **WMA**



Why you have to choose WMA Services?

- ◆ To eliminate waste in your organization's process, system and method
- ◆ To create transparency in Work and Process flow
- ◆ To better utilization of Men, Material and Machineries
- ◆ To make your organization system Driven
- ◆ To beat worldwide competition in terms of Productivity and Quality

What qualities separate WMA from other lean consulting and training organizations?

- ◆ Result oriented
- ◆ Smart Work and Commitment
- ◆ Transparency and Trust
- ◆ Exemplary Customer Focus
- ◆ Strong and Deed routed Attitude towards
 - ◆ Quality Excellence
 - ◆ Customer Care



Lean Implementation Steps

If you are interested in implementation of Lean Manufacturing system, there is Basic Proposal for the Lean Implementation. To keep it clear and concise WMA likes to refer to the implementation steps that worked the best, from its experience.



➤ **Operational Team – Ownership**

Committed, Key Operational persons need to form a team to take a decision on Lean Manufacturing requirement. WMA will discuss with the key persons and makes a brief presentation on **Need of Lean System and its Benefits**

➤ **Lean Intensive Training**

Based on discussion with Operational Team, WMA provides intensive Training to the operational team on Lean Manufacturing system, Lean Tools and Lean Elements.

➤ **Value Stream Mapping**

VSM of product needs to be drawn. With the help of VSM Current State and future State will be designed. Opportunities in accordance with business objectives for improvement on the Current State Map will be specified.

➤ **Project Plan**

With the information from the VSM Plan, lean implementation plan, with responsibilities and due dates will be decided

➤ **Project Implementation & Review**

Based on VMS Future State, Operating Strategy needs to be designed and Executed. WMA will help to sustain the benefits through Standard Operating Procedures.

More Information about WMA

Specialisation of WMA

- An International LEAN Consultant.
- Specialized Trainer in Toyota Production System
- Professionally specialised in Apparel Technology



Working Zones:

Currently the Consulting Firm is providing its services in

- Malaysia
- China
- Cambodia
- Hongkong
- South Korea
- Thailand
- Vietnam
- India(Bangalore, Hyderabad, Tirupur, Ludhiyana, Delhi)
- Srilanka



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For Further Information Long on www.wma-ind.com

About Dammika Perera, Managing Director of WMA

Dammika Perera (DP) has been involved in engineering and manufacturing field for over 20 years. He has provided leadership in the fields of Lean Manufacturing, Value Stream Mapping, Industrial Engineering, Employee Training and Development, and all aspects of the production process. Having served in a variety of industries, DP has successfully implemented Lean Manufacturing system. He has helped numerous businesses to become more successful, by implementing Lean manufacturing Quality and Productivity Improvements, Increasing Capacity, and Reducing Lead-times and Inventories.

Experience

DP's background includes experience in:

- Lean Manufacturing
- Traffic Light System
- Lean Engineering and Re-engineering
- Product Safety and Compliance
- Supply Chain Management
- CT-PAT
- Brand Protection.....etc



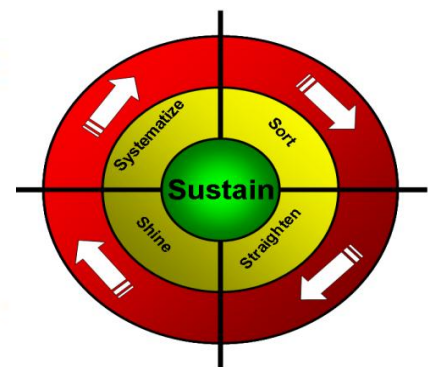
In addition, DP's career has allowed him to gain a wide range of expertise in such areas as:

- 6S
- Cellular Manufacturing
- Quick Changeover
- Kaizen Promotion
- Six Sigma
- 4 point System
- Project Management

Education & Training

- Bachelor of Engineering
- Professionally trained by Asia Managements HK Ltd, Lean Association – USA HQ
- Practically trained under the guidance of Mr. Declan O'callaghan - Ireland, Mr. David Meier – USA, Mr. Jeffry K Liker – USA of Toyota Training Team, Japan.
- Undergone Intensive Training on Lean Manufacturing at Okinawa Plant - Japan, Mercury Marin Plant -USA and Rolls Royce Boing Engine Plant USA for 6 months.

Using his experience DP has assisted many clients with the implementation of improvements, optimizing their resource and material management capabilities. His proven track record for creating profitable, flexible, customer-focused manufacturing environments with highly motivated employees, makes him a valuable asset to any organization



..... and Ends With Desired Results