CONFIDENTIAL AND PROPRIETARY
Any use of this material without specific permission of PKC is strictly prohibited

KAIZEN

Contents

- What is Kaizen (Overview)
- Why Kaizen
- Kaizen Approach
- Tools used to implement Kaizen
- Kaizen Case Study
- Summary

Overview

- Kaizen is a Japanese term which simply means change for the better

What is Kaizen?

- **The primary goal of kaizen is to achieve excellence in quality, cost and delivery simultaneously**
  - Total Quality Management and Control (TQM and TQC) are key elements supporting quality production
  - In Kaizen cost management is not cost cutting but reducing cost by eliminating waste
- **Develop products with higher quality, lower cost and higher productivity in meeting customer demand**
- **Kaizen in more of a continuous improvement mindset than a tool**
- **The key piece of Kaizen mindset is that everything can be improved and everything can perform better or more efficiently**

Kaizen Principles

Change

Efficiency

Performance

Elimination of waste

- Achieve all the above through continuous improvement

Why Kaizen?

- Just in time process improvement
- Low cost & low risk
- Better results
- Speed up the change process
- Structured approach
- Used by many companies as a way to obtain great benefits in a quick and effective manner
- Does not demand great investment for implementation but demand continuous efforts and commitment
- Does not need high cost technology but low cost techniques are sufficient

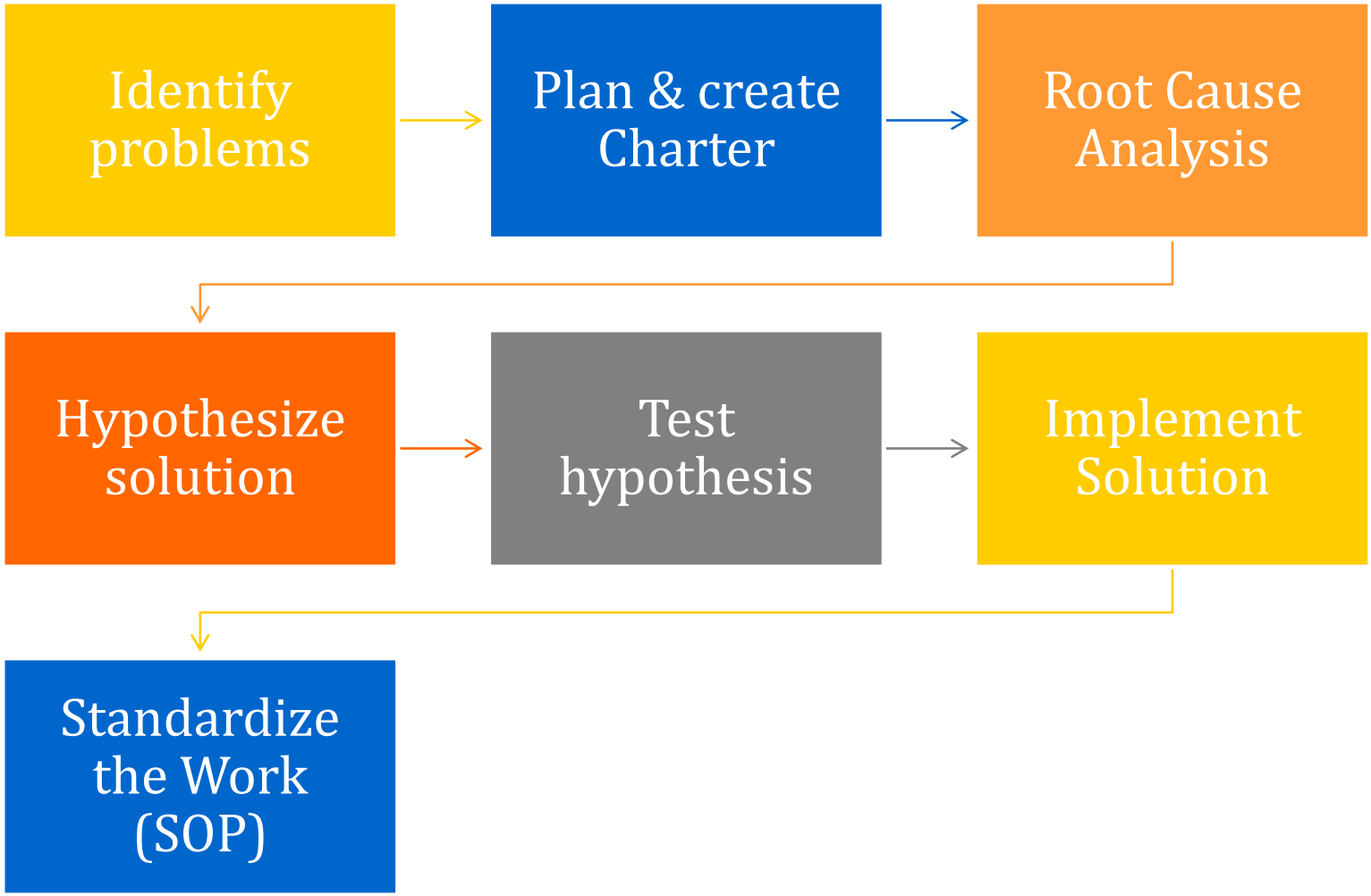
Need for Kaizen

It helps organization to achieve better operational excellence and improve their productivity through

- Discovering problems at their source and solving at the source
- Decreasing the waste in some areas
- Better use of production capacity, capital and employee retention
- Elimination or transformation of existing procedures
- Concentrating on small improvements to get immediate results

Kaizen Approach

Kaizen Approach



Kaizen Approach

- It can greatly contribute towards the growth of your business, standardize the working culture and measure all possible metric to attain the best market results
- Kaizen should be considered to be a long term project
- Trying to link Kaizen to key performance indicators
- All employees of an organization needs to be involved in Kaizen activity
- Need to commit to the process and ready to accept small changes

Kaizen Tools

1. PDCA
2. 5 Why's?
3. Cause and Effect Analysis/Fish-bone Analysis
4. Kanban
5. TQM
6. Just In Time (JIT)
7. Total Productive Maintenance
8. ...

PDCA

- **P**lan **D**o **C**heck **A**ct

PDCA - Stages

Plan for changes to Bring about improvement

- Flow charting
- Brainstorming
- Root cause analysis

Do changes on a small scale to first try them out

- Experiment design
- Conflict resolution

Check to see if changes are working and to investigate selected process

- Control Charts
- KPI's
- Data check sheets

Act to get the greatest benefit from changes

- Process standardization
- Formal training for standard process

When to Use PDCA

- There is a problem that needs to be addressed
- Have a solution for problem but not sure if it would work 100%
- It always makes sense to run well crafted pilot projects
- Then if the pilot does not produce expected results, have a change to improve and fix the problem

Advantages of PDCA

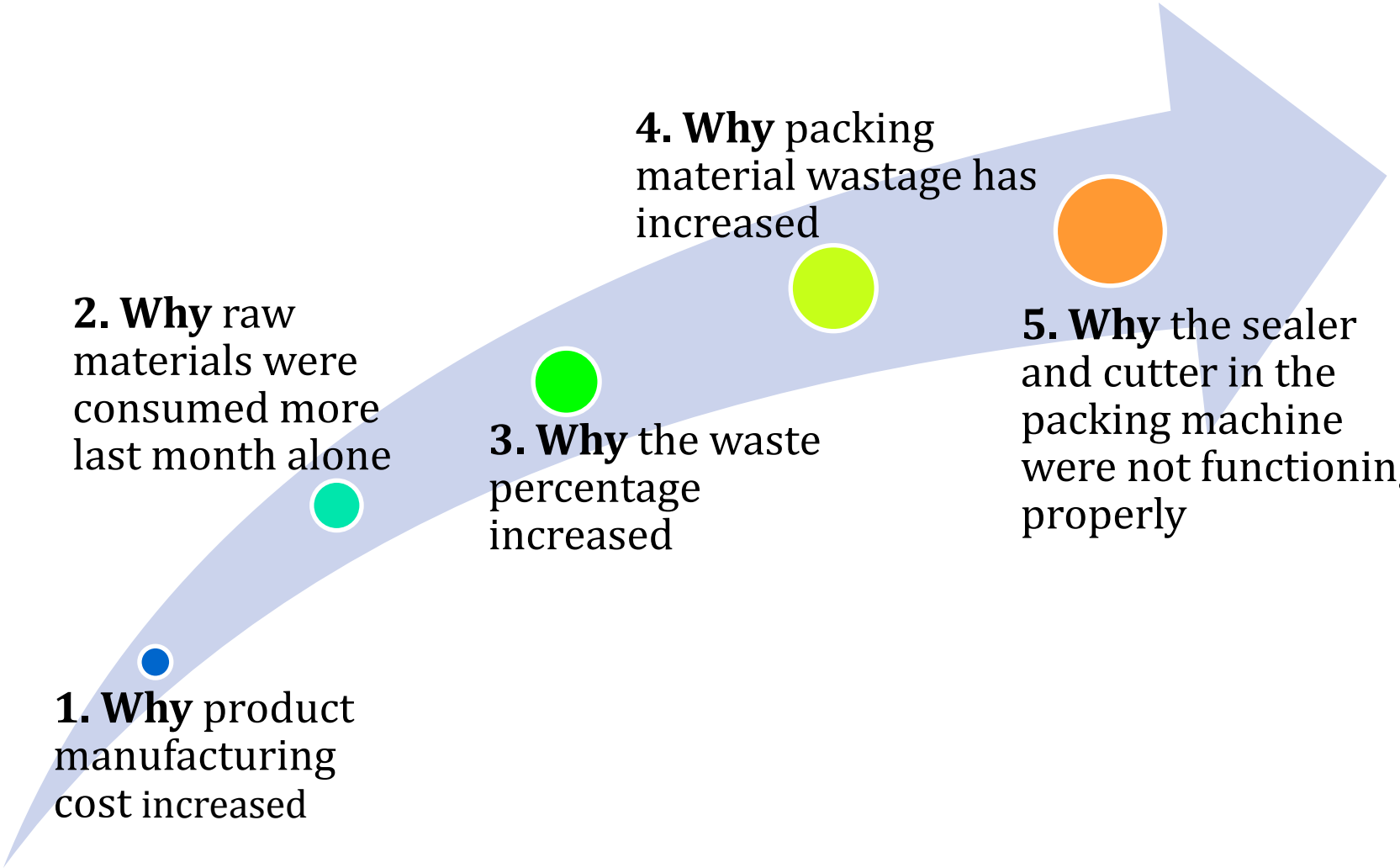
- PDCA provides a simple but effective approach
- Encourages you to be methodical in your approach to problem solving and implementing solutions
- It helps in increasing the processes ensuring the quality of product or process is up to the industrial standards
- Minimizes cost by allowing a business to test a process or model before implementing which might work or not
- Once a model or process is tested and approved, then it can be easily transferred to other parts of the business

5 Why's

5 Why's

- It is a analysis method used to identify the root cause of a problem
- This method involves asking why's in continuous succession
- It is a iterative question asking technique to drill down to the root of the problem

5 Why's Example



Kaizen - Case Study

Kanban System

XYZ Industries

Improve On-Time Delivery

Case Study : Kanban System

xyz Industries

- Producers of screws, fasteners and other automobile parts for Ford, GM and Chrysler
- Customer orders start coming in 10 days before the date of delivery
- Production team will have a duration of 10 days for most customer order to complete the production
- The parts are picked up by the customers on the date of delivery

Case Study : Kanban System

Problem Statement:

- Unable to meet on-time delivery due to under production
- Over production leading to inventory holding cost and raw material cost
- Unable to control WIP and FG inventory

Objective:

- Manufacture products 3 days ahead of delivery date
- Manufacture only the required quantity or demanded quantity

Solution:

- Implement Kanban system for high running products

Case Study : Kanban System

- Kanban is a card with an inventory number attached to a part
- Right before the part is dispatched, the card is detached and sent to the production as a request for another part
- So, a part is manufactured only if there is a Kanban card for it

Case Study : Kanban System

Customer selects the product

FINISHED GOODS

Produced part send to FG with Kanban card attached

Checkout

Production initiated for the Kanban card

Clerk scans the product

Kanban card removed & sent to production

Kanban Card

XYZ Industries

KANBAN CARD

S. No : 1 of 24

Customer Name : FORD

Part Number: 6C3417A386AB

Std Quantity : 500

 # Totes : 24

FORD-6C3417A386AB-1-24-500

Case Study : Kanban System

- No items are made or moved without a Kanban
- A kanban must accompany each item at all times
- The number of kanban were monitored carefully to reveal problems and opportunities for improvement

Summary

- Kaizen
  - Continuous Improvement
  - Change for good
  - Discard conventional fixed ideas
  - Think of how to do it, not why it cannot be done
  - Ask 5 Why? And determine Root Cause Analysis
  - Do not seek perfection, do it even if you have only 50% of the target
  - Correct it right away, if you make a mistake
- Need for Kaizen
  - Easy to implement
  - Step by step process
- Kaizen Tools
  - PDCA, 5 why's, Kanban, etc…

Contact Us

For more information,
please contact:

Swetha Kochar
Associate Partner
+91-98401-30516
swetha@pkcindia.com

Corporate Office
+91-44-25323-666
info@pkcindia.com

www.pkcindia.com

Follow PKC Management Consulting on

Disclaimer: The information contained herein is of a general nature and based on authorities that are subject to change. Applicability of the information in specific situations should be determined through consultation with our advisors.