

Welcome

Chitransh Chamber of Commerce

Importance of Quality in the Business

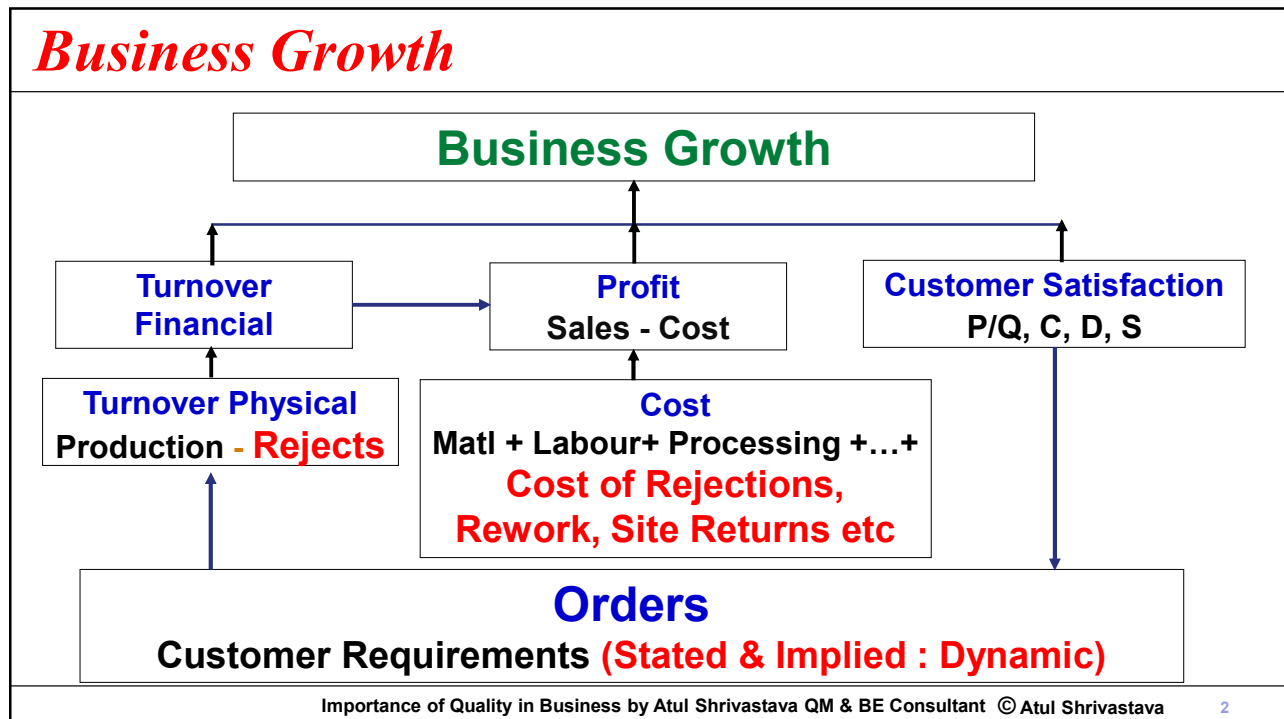
8th March 2025

By

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Retired GM BHEL and Quality Management & BE Consultant

Business Growth



Internal Failure Cost

What happens when defects are detected (before dispatch)

- **Rework/ re-processing which may/ may not require**
 - **Additional material/ consumables,**
 - **Disassembly/ reassembly,**
 - **Change mating part, with or without contractual obligation but compromising interchangeability,**
 - **etc etc**
 - **Re-inspection, Retesting**
 - **Downgrading**
 - **Rejection**
 - **Delayed delivery resulting in customer dissatisfaction**
- Additional cost of man power/ material/ processing or machining etc**

Customer does not pay for 'Failure Cost'

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External Failure Cost

What happens when defects are detected at customer premises

- **Repair which may/ may not require**
 - **Transportation/ Re-transportation to works and back,**
 - **Reworking/ Reprocessing**
 - **Re-inspection, Retesting**
 - **Warranty obligations**
 - **Customer dissatisfaction leading to bad perception**
- Additional cost of man power/ material/ transport/ re-packing etc**

Customer does not pay for 'Failure Cost'



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Defects

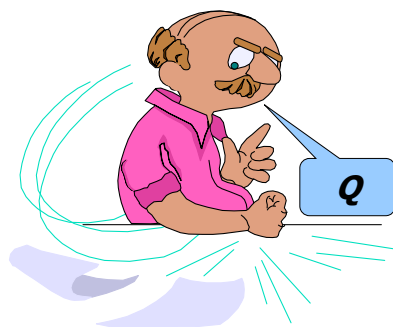
Anything that **dissatisfies** Customer (internal or external) is a defect. Customer requirements are Dynamic

❑ Lower the Defects/ wastages

- Lower Cycle time (Delivery in time)
- Lower Cost of production
- Higher Customer Satisfaction
- Higher People Satisfaction
- Higher Profits
- Higher Growth

Reduce/ Eliminate Defects for Business Growth

Who decides Quality



Customer

whether

Internal or External

**Understanding and Satisfying
Customer Needs and
Expectations is *Key to Quality***

Customer Satisfaction....

Quality/ Performance

Cost

Delivery

Service after Sales

**Key to success in
winning orders**

**Ensure Customer
Loyalty**

***National/ International competition determines
Customer expectations***

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Business Growth relates to....

- Meeting and anticipating dynamic requirements of customers, stated and implied
 - At a given time and over a period of time
 - At a price the customer can afford and is willing to pay
- Continuously bringing down the cost of production and reducing waste
- Introducing new and better products into the market faster than competitor
- Bringing innovativeness and creativity in all processes (to meet dynamic needs & expectations of Customer)

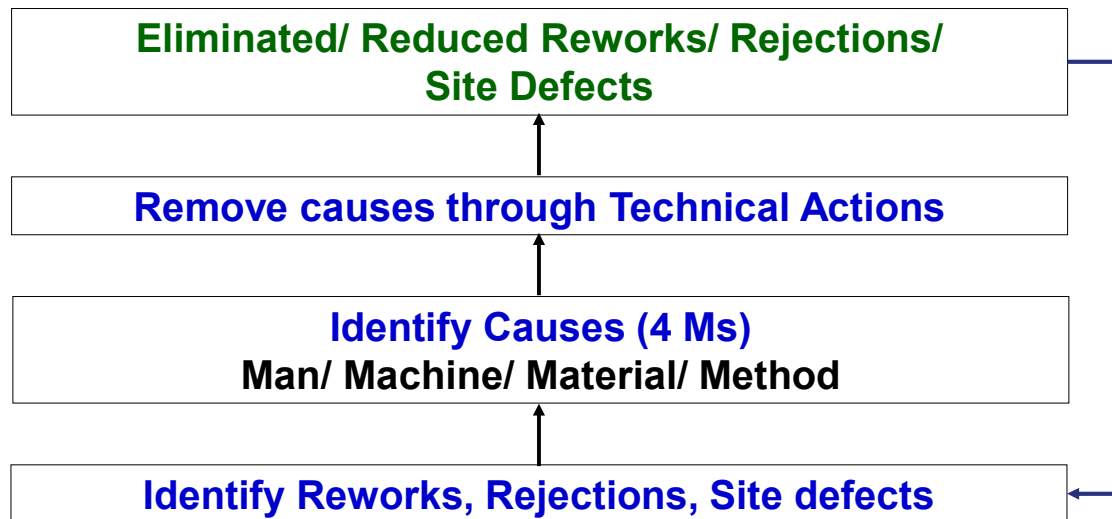
Quality results in 'Customer Satisfaction (QCDS) and

Customer Delight - Value perceived by Customer / Price paid >> 1

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Reducing Defects for Business Growth...



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Inspection & Quality Control



Inspection is :

- Defect **detection** (in a product/ service)
- A **postmortem** activity
- Cannot prevent occurrence of Defects

Quality Control is :

- Defect **prevention** (in a process)
- A **proactive** activity
- Prevents occurrence of defects **by controlling the Process**

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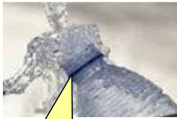
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Quality Control

Process

Filling a given Water Bottle with tap water

? What is the Problem
? What are the Causes
? How to Control or
Eliminate Rejections,
that is Water Splashing



Bottle Mouth Dia is
Specification
Cannot be changed



High Variations in Process/
Control Limits Higher than
Specification

Water Splashing Out
Rejections

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Controlling a Process



Controlling the Process
Bringing Control Limits within
Specification Limits
No splashing/ Rejection



Ideal Process
Process Average & Variation
aligned to Specification mean
and Limits
No Rejections

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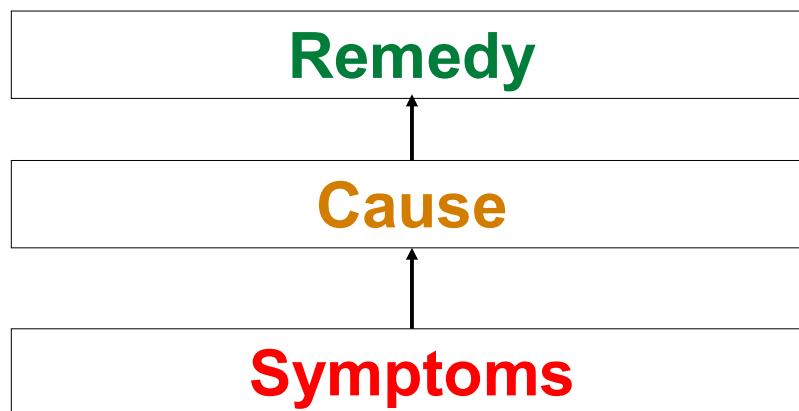
Quality Control Leads to...



- ❖ **Improvement**
- ❖ **Improvements over Improvement**

***Continuous Improvement
To meet Dynamic
Customer needs & Expectations***

Organisational Growth



Seven QC Tools

Basic tools for bringing improvements.

Used to:

- **Detect Problems**
- **Narrow Problems area/summarise data**
- **Assess Factors which seem to cause the problem**
- **Determine whether the assumed causes of Defects are true or not**
- **Prevent errors due to omission, haste or carelessness**
- **Confirm the effects of improvement**
- **Detect outliers**

Just by using 7 QC Tools, we can solve => 95% of problems

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Seven QC Tools

- 1. Check sheet**
- 2. Stratification**
- 3. Pareto Diagram**
- 4. Histogram**
- 5. Cause and Effect Diagram**
- 6. Graphs and Charts**
- 7. Scatter Diagram**

Just by using 7 QC Tools, we can solve => 95% of problems

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जिन खोजा तिन पाइयाँ, गहरे पानी पैठ
Explore Depths for Achieving Heights

धन्यवाद

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