

CQE Training & Consultancy Plt (Reg No. : LLP 003668 LGN)

Registered Office: No. 46, Lorong Bintang, Taman Tasik Permai, 34000 Taiping, Perak. Malaysia.

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STATISTICAL ANALYSIS TOOLS (SAT)

(IN HOUSE / PUBLIC TRAINING PROGRAMME)



Introduction

There is an increasing awareness that problem solving skill among employees is an important and essential critical skill for organization success and to remain viable in today's very competitive business environment. Employee empowerment and involvement has made a breakthrough in employees' thinking to take responsibility for the processes that are under their control. However employees' today are plagued with increasing demands for attaining higher performance goals and sustaining performance that demands employees ability to solve problems and apply discretion where they do not normally do so until very recently.

The quality revolution has brought about increasing customers' demands and higher expectation to lower cost of production to maintain profitability. These twins conflicting objectives mean that the workforce including management personnel must constantly collaborate and deploy intelligence throughout the organization. This is necessitated by the need to co-opt the whole workforce in this collaborate process to deal with problematic issues that are being faced by all organizations with incessant rapidity. The workforces' improved capability to solve problem especially with Fact and Data Driven Approach become a necessary requirements in any continuous improvement journey embarked by any organizations. Statistical Analysis Tools (SAT) become an important knowledge and skills that every employee must master in order to have a proper and meaningful analysis to extract useful information to assist in decision making and problem solving processes.

Learning Outcomes/Objectives

Also available as in-house programme

 ${f A}$ fter attending the course, participants should be able to:-

- Recognize the type of statistical analysis tools that available for usage;
- ✓ Able to use effective 7 QC tools to identify problem causes, analyze data, conduct evaluation and rectify problem for quality, productivity and cost improvement;
- ✓ Organized method of approaching a problem and the thinking habit that is essential to ensure a successful problem solving in the organization;
- ✓ Promote Fact and Data Driven Management concept within organization operation.



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Contents

Apply MS Excel & Minitab Software

Day 1

Data Collection / Checksheet

- **♣** Data collection
- Why are data collected?
- ♣ What kinds of data are collected?
- Common mistakes made in data collection
- Recording Checksheets, Checklist Checksheets and Location Checksheets

Pareto Diagram

- ♣ Pareto principle
- **♣** Why are Pareto Diagrams used?
- ♣ When and How to use Pareto Diagrams?

• Cause and Effect Diagram

- **4** Brainstorming
- ♣ Importance of Cause and Effect Diagram
- ♣ When and How to use Cause and Effect Diagram ?
- Critical Factors to consider

Histogram

- **♣** How to draw Histogram?
- ♣ What information we can get from Histogram ?
- Advantages of Histogram

Scatter Diagram

- What is Scatter Diagram?
- Relationship of data
- ♣ When and How to use Scatter Diagram ?



Graphical Charting

- What is Graphical Charting
- Purpose and benefits
- ♣ How and when to use charting?

Stratification

- **What is Stratification?**
- Stratification principle
- **♣** When and How to use Stratification?

Flow Charting

• 1 H and 5 W

Note: MS Excel and Minitab software will be used to illustrate the statistical analysis processes.

Who Should Attend

Production and Operation Managers, Executives, Engineers and Supervisors, Quality, Technical, Engineering and those involved in Project Improvement activities in any organization.



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Duration

1 day

Training Methodology

 ${f T}$ he program would be conducted by using the following materials / aids :-

- ✓ Course Note
- ✓ OHP/LCD
- ✓ Video Showing
- ✓ Group Activities
- ✓ Lecturettes



