

Questions and Answers on TQM Tools

By

Group # 1

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Preparing questions on : -Weighted Voting

- Three Actual Rule
- Scatter Diagram
- Run Chart

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Preparing questions on : - Process Map

- Pie Chart
- Pareto Chart
- Histogram

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Preparing questions on : - Gantt Chart

- Force Feild Analysis
- Flow Chart
- Decision Matrix

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Preparing questions on : - Control Chart

- Check Sheet
- Cause & Effect diagram

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Preparing questions on - Brainstorming

- Bar Chart
- Affinity Diagram

Q1- In weighted voting tool, how many votes are recommended to be given to each member if there are 10 members and 10 options?

A1- As a rule of thumb, the no. of votes each member gets should be 1.5 times the no. of options, therefore

$$\text{No. of votes} = 10 \times 1.5 = 15 \text{ Votes}$$

Q2- How can we tell from looking at a scatter diagram that two variables are related?

A2- If the dots form a diagonal line

Q3- A “Run Chart” tool (turned on it side) provide the data for what other tool?

A3- Histogram

Q4- In the Control Chart, if the upper and lower limits are removed, then what tool will be created?

A4- Run Chart

Q5. When is a process map an excellent tool to use? And how many functions should be listed on this process?

A5. When it is a cross-functional since each function is displayed as a separate row on the chart. Process maps can be used for any process, simple or complex, long or short, as long as the process is cross-functional.

2-6 functions and if there is only one function involved, a flow chart is probably a better choice to diagram the process.

Q6. What is the benefit of the Pie chart?

A6. When we need to display and easily interpret the relationship of each category to not only the whole but to each other.

Q7. Explain the 80/20 rule? How is the data for a Pareto chart obtained?

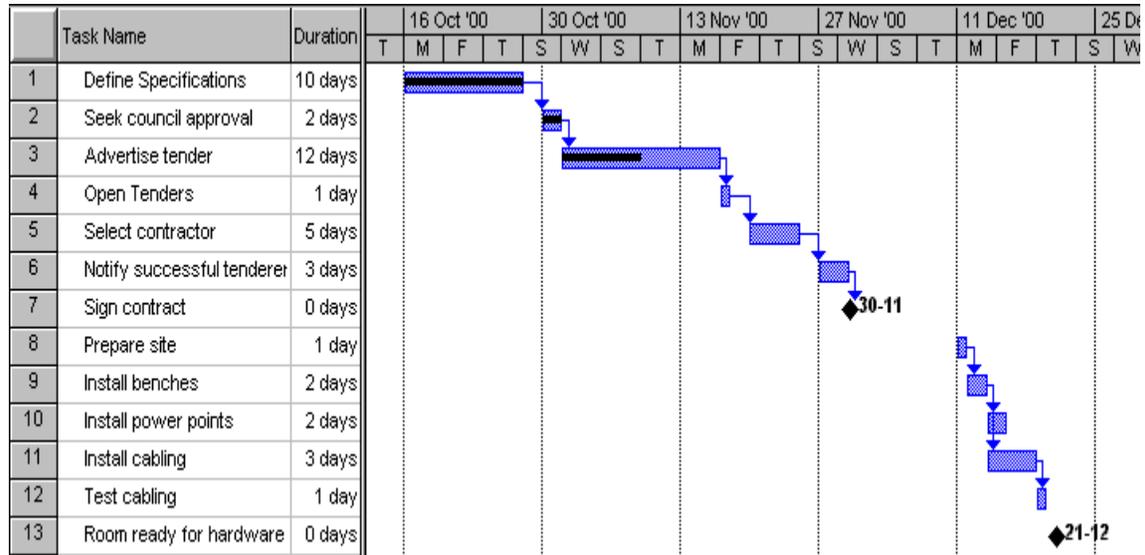
A7. It means that approximately 80% (most) of the problems in a process are caused by 20% (only few) of the possible causes.

Q8. Why do we use histogram in TQM? Frequency table is useful in construction of which tool?

A8. To see if a process is within specification by looking at the distribution of bars of the histogram to see if they lie within the specification limits.

, A frequency table is one of the important steps in constructing a histogram we need this chart because the bars in histogram indicate the frequency.

Q9.



Milestone = What does it represent in a Gantt Chart and What is its length?

A9. Milestone: The diamonds show *milestones*. Milestones are significant points of progress in the project. They have zero length: no work is actually needed for a milestone. They mark major points of project development.

Q10. In which of the TQM Tools do we make a “T” Diagram?

A10. Force Field Analysis.

Q11. Flowchart of a process indicates the _____ to be per formed and the _____ in which they occur.

A11. Operations/Activities/Tasks, Sequence/Order

Q12. There are at least 13 different names of Decision Matrix. Name at least 4 of them!

A12.

1. AHP Matrix
2. Bid Decision Matrix
3. Comparison Matrix
4. Decision Alternative Matrix

Q18: What are the brainstorming steps?

A18: The steps are:

1. Generate ideas.
2. Evaluate ideas
3. Decide using consensus.

Q19: What is the best technique out of the brainstorming methods?

A19: The best method is a combination of the various brainstorming methods. E.g. the brainstorming session may start with a round-robin or slip method and move into a freewheeling method to add more ideas.

Q20: What is the difference between the slip method and Crawford slip method?

A20: In the slip method; all ideas are written on a slip of paper, while in case of the Crawford slip method, each idea is written on a separate slip of paper.