Checklist for good graphics

The Art of Computer Systems Performance Analysis: Techniques for Experimental Design, Measurement, Simulation, and Modeling
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Guidelines for Preparing Good Graphic Charts

1. Require Minimum Effort from the Reader
2. Maximize Information
3. Minimize Ink
4. Use Commonly Accepted Practices
5. Make several trials before arriving at the final chart. Different combinations should be tried and the best one selected.

Common Mistakes in Preparing Charts

1. Presenting Too Many Alternatives on a Single Chart
2. Presenting Many y-Variables on a Single Chart
3. Using Symbols in Place of Text
4. Placing Extraneous Information on the Chart
5. Selecting Scale Ranges Improperly
6. Using a Line Chart in Place of a Column Chart

Checklist for Good Graphics

1. Are both coordinate axes shown and labeled?
2. Are the axes labels self-explanatory and concise?
3. Are the scales and divisions shown on both axes?
4. Are the minimum and maximum of the ranges shown on the axes appropriate to present the maximum information.
5. Is the number of curves reasonably small? A line chart should have no more than six curves.
6. Do all graphs use the same scale? Multiple scales on the same chart are confusing. If two charts are being compared, use the same scale if possible.
7. Is there no curve that can be removed without reducing the information?
8. Are the curves on a line chart individually labeled?
9. Are the cells in a bar chart individually labeled?
10. Are all symbols on a graph accompanied by appropriate textual explanations?
11. If the curves cross, are the line patterns different to avoid confusion?
12. Are the units of measurement indicated?
13. Is the horizontal scale increasing from left to right?
14. Is the vertical scale increasing from bottom to top?
15. Are the grid lines aiding in reading the curve?
16. Does this whole chart add to the information available to the reader?
17. Are the scales contiguous? Breaks in the scale should be avoided or clearly shown.
18. Is the order of bars in a bar chart systematic? Alphabetic, temporal, best-to-worst ordering is to be preferred over random placement.
19. If the vertical axis represents a random quantity, are confidence intervals shown?
20. Are there no curves, symbols, or texts on the graph that can be removed without affecting the information?
21. Is there a title for the whole chart?
22. Is the chart title self-explanatory and concise?
23. For bar charts with unequal class interval, is the area and width representative of the frequency and interval?
24. Do the variables plotted on this chart give more information than other alternatives?
25. Does that chart clearly bring out the intended message?
26. Is the figure referenced and discussed in the text of the report?