Session 3 Handout: Visualize

FAST-11 AI-Assisted Analytics and Business Intelligence · 7formations · Instructor: Wadood Chaudhary · All examples fictional

Why this session matters

AI tools will draft a chart or a whole dashboard page in seconds. Some drafts are excellent; others use a cut-off axis, the wrong chart type, or twelve colors that hide the message. Readers trust charts more than tables, so a misleading chart does more damage than a wrong number in a cell.

Key concepts

1. Choose the visual for the question

Question	Visual
Trend over time	Line chart
Compare categories	Bar chart, sorted
Part of a whole	Sorted bar (pie or donut only for 2-3 parts)
Relationship between two measures	Scatter plot
Exact values for lookup	Table

One message per chart. **Title with the takeaway** ("VF-4 produced 41% of Q3 scrap cost"); put the formal description and source in a subtitle or note.

2. Fix misleading charts

Problem	Fix
Cut-off axis on bars	Start at zero
3D, gradients, many colors	Flat, one color plus one highlight
Missing labels or units	Axis titles with units; source note
Wrong chart type	Match the question (above)
Categories drawn as a line	Use bars

Then **check every number against your verified results** (W2).

3. Dashboards

- Start with **the reader's questions** (three to five).
- Few visuals, clear filters, consistent colors.
- Draft with Copilot for Power BI or Tableau AI; then edit.

- Test with a reader: "Which question couldn't you answer in 10 seconds?"
- Add a text alternative or data table for accessibility.

Worked example (fictional)

An AI draft showed Q3 scrap by machine with the y-axis starting at $1,000, so VF-4's bar looked more than 20 times taller than Saw-1's when VF-4's cost was really about five times higher. Fixed: axis from zero, bars sorted high to low, VF-4 highlighted, title "VF-4 produced 41% of Q3 scrap cost," and source note "Bayside scrap log, cleaned (W1), July to September 2026."

Checklist

- ☐ Each visual answers one reader question.
- ☐ Chart type matches the question.
- ☐ Bars start at zero; axes labeled with units.
- ☐ Takeaway titles; source notes.
- ☐ Every number checked against W2.
- ☐ Tested with a reader.

Do and don't

Do	Don't
Highlight the one bar that matters	Use a color per category by default
Sort bars	Sort alphabetically when ranking matters
Title with the message	Title "Chart 1"
Edit AI-drafted pages	Publish the first draft