

1. **Match Table** ★★★ (ESSENTIAL)

What It Shows:

- All 40 collaboration matches with details
- Searchable, sortable list

How to Build:

- Visual Type: **Table**

- Fields to Add:

- `UserName`
- `MatchName`
- `UserDept`
- `MatchDept`
- `CCS_Total`
- `Topic_Match`
- `Method_Match`
- `Career_Fit`
- `Explanation`

Formatting Tips:

- Enable **Word wrap** for Explanation column
- Sort by CCS_Total (descending) to show best matches first
- Make CCS_Total column wider and bold
- Use conditional formatting: Color-code CCS_Total (green for high, yellow for medium)

Why It's Important:

- Shows the core data clearly
- Most interactive element users will use
- Demonstrates data organization skills

2. **Slicers (Filters)** ★★★ (ESSENTIAL)

What It Shows:

- Interactive filters to explore data

How to Build:

- Visual Type: **Slicer** (create 3-4 of these)
- Slicer 1: `UserDept` - Filter by department
- Slicer 2: `UserMethod` - Filter by research method
- Slicer 3: `CCS_Total` - Filter by score range (use "Between" mode)
- Slicer 4: `UserStage` - Filter by career stage (optional)

****Formatting Tips:****

- Position all slicers on the left side, stacked vertically
- Make slicers wide enough to read easily
- Use "Dropdown" or "List" style (looks cleaner than buttons)

****Why It's Important:****

- Shows interactivity skills (key for DSAR)
- Enables cross-filtering demo
- Most impressive feature to show in interview

3. CCS Score Distribution ★★ (HIGHLY RECOMMENDED)**

****What It Shows:****

- Distribution of collaboration scores
- How many matches fall in each score range

****How to Build:****

- Visual Type: **Column Chart** or **Bar Chart**
- **Axis (X):** `CCS_Total`
- **Values (Y):** Count of `CCS_Total`
- **Title:** "CCS Score Distribution"

****Advanced Option - Bins:****

- Right-click `CCS_Total` in Fields → **New Group**
- Set bin size to 5 (creates ranges: 70-75, 75-80, 80-85, etc.)
- Use the grouped field instead

****Formatting Tips:****

- Use gradient color (darker green for higher scores)
- Add data labels showing counts
- Rotate x-axis labels if needed

****Why It's Important:****

- Shows data analysis thinking
- Demonstrates chart creation skills
- Easy to explain to interviewers

4. Summary Cards (KPIs) ★★ (HIGHLY RECOMMENDED)**

****What It Shows:****

- Key metrics at a glance
- Quick stats for decision-making

****How to Build:****

Create 3-4 separate Card visuals:

****Card 1: Total Matches****

- Visual Type: ****Card****
- Field: Count of `UserName` (or any field)
- Title: "Total Matches"

****Card 2: Average CCS****

- Visual Type: ****Card****
- Field: `CCS_Total`
- Change aggregation to ****Average**** (click dropdown arrow)
- Title: "Average CCS Score"

****Card 3: High-Quality Matches****

- Visual Type: ****Card****
- Field: `CCS_Total` (Count)
- Add Filter: `CCS_Total` > 85
- Title: "High-Quality Matches (>85)"

****Card 4: Method Diversity** (Optional)**

- Visual Type: ****Card****
- Field: `UserMethod` → Distinct Count
- Title: "Research Methods"

****Formatting Tips:****

- Position cards at the top in a row
- Use large font for numbers
- Use professional colors (blue/gray scheme)
- Add subtle borders or backgrounds

****Why It's Important:****

- Shows understanding of KPIs
- Demonstrates business intelligence thinking
- Common in professional dashboards

5. **Method Complementarity Matrix ★ (NICE TO HAVE)**

****What It Shows:****

- Which research method combinations score highest
- Heatmap showing method pairing effectiveness

****How to Build:****

- Visual Type: **Matrix** or **Table**
- **Rows:** `UserMethod`
- **Columns:** `MatchMethod`
- **Values:** Average of `CCS_Total`

****Alternative (Simpler):****

- Visual Type: **Stacked Column Chart**
- **Axis:** `UserMethod`
- **Legend:** `MatchMethod`
- **Values:** Average of `CCS_Total`

****Formatting Tips:****

- Use color scale (green = high scores, red = low)
- Enable conditional formatting
- Add data labels

****Why It's Important:****

- Shows advanced visualization skills
- Demonstrates data analysis depth
- Impressive for interviewers

6. **Department Analysis** ★ (NICE TO HAVE)

****What It Shows:****

- Which departments have most matches
- Department distribution

****How to Build:****

- Visual Type: **Bar Chart** (horizontal)
- **Axis:** `UserDept`
- **Values:** Count of matches
- **Title:** "Matches by Department"

****Formatting Tips:****

- Sort by value (descending)
- Use consistent colors
- Highlight Gies Business if prominent

****Why It's Important:****

- Shows you can analyze by business dimensions
- Relevant for DSAR work (department reporting)

7. **Career Stage Pairings** ★ (NICE TO HAVE)

What It Shows:

- Distribution of career stage combinations
- Mentorship vs peer collaboration patterns

How to Build:

- Visual Type: **Stacked Bar Chart**
- **Axis:** Create a calculated column: `UserStage & " + " & MatchStage`
 - Or use **Matrix** visual with `UserStage` as rows and `MatchStage` as columns
- **Values:** Count of matches

Simpler Option:

- Visual Type: **Pie Chart** or **Donut Chart**
- **Legend:** `UserStage`
- **Values:** Count

Formatting Tips:

- Use distinct colors for each stage
- Add percentage labels

Why It's Important:

- Shows you understand the data meaningfully
- Demonstrates storytelling through visuals

8. **SDG Alignment Heatmap** ★ (OPTIONAL)

What It Shows:

- Which SDG pairs create best matches
- Topic alignment patterns

How to Build:

- Visual Type: **Matrix**
- **Rows:** `UserSDG`
- **Columns:** `MatchSDG`
- **Values:** Average of `Topic_Match`

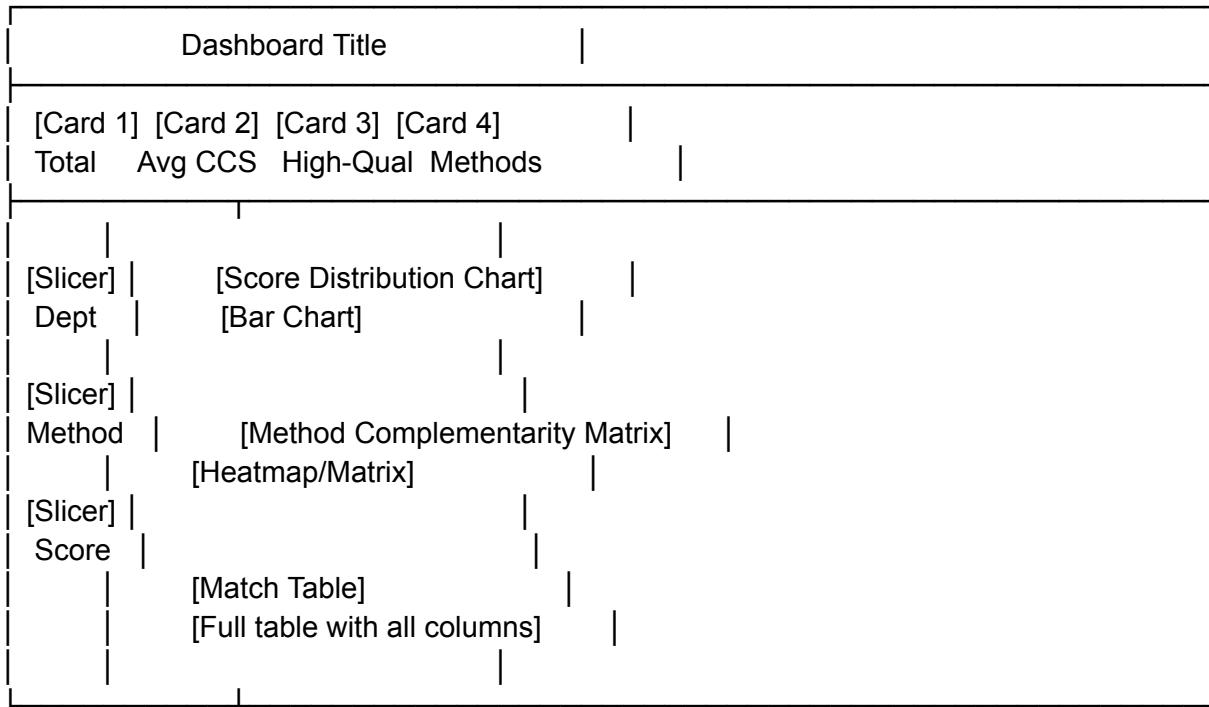
Formatting Tips:

- Use heatmap color scale (red to green or blue gradient)
- Enable conditional formatting
- Add data labels showing averages

Why It's Important:

- Shows advanced analysis
- Demonstrates understanding of the algorithm components

📊 Layout Recommendation



🎨 Design Tips for All Visuals

Color Scheme:

- Use UIUC colors (Blue #13294B, Orange #F47A00) if appropriate
- Or use professional blues/grays
- Keep consistent across all visuals

Fonts:

- Use clean fonts (Segoe UI, Calibri)
- Keep sizes readable (12pt minimum for text, larger for titles)

Spacing:

- Give visuals room to breathe
- Align visuals neatly
- Use consistent padding/margins

Titles:

- Every visual should have a clear title

- Keep titles concise but descriptive

⚡ Quick Build Priority

Must Have (15 min):

1. Match Table
2. 3 Slicers (Dept, Method, Score)
3. Enable cross-filtering

Should Have (+10 min):

4. Score Distribution Chart
5. 3 Summary Cards

Nice to Have (+15 min):

6. Method Complementarity Matrix
7. Department Analysis Chart

If Time Permits:

8. Career Stage visualization
9. SDG Heatmap

🤔 What to Say About Each Visual

Table:

> "This is the core data table showing all 40 matches. I've made it sortable and included all key information, including the explanations for why each match works."

Slicers:

> "These interactive filters allow users to explore the data by department, research method, or score range. When you select a filter, all other visuals update automatically through cross-filtering."

Score Distribution:

> "This histogram shows the distribution of collaboration scores. You can see most matches fall in the 85-90 range, indicating consistently high-quality recommendations."

Summary Cards:

> "These KPI cards provide quick metrics at a glance—total matches, average score, and how many high-quality matches we have. This is the kind of executive summary view that's valuable for quick decision-making."

Method Matrix:

> "This heatmap shows which research method combinations score highest. For example, Theoretical plus Empirical methods consistently produce high collaboration scores, which aligns with the algorithm's design."

Pro Tips

****Cross-Filtering:****

- Click on each slicer → Click "Filter" icon for all other visuals
- This makes everything update together (most impressive feature!)

****Conditional Formatting:****

- Right-click on a field → ****Conditional Formatting****
- Great for coloring scores (green = high, red = low)

****Data Labels:****

- In Format pane → ****Data labels****
- Turn on to show numbers on charts

****Tooltips:****

- Visuals can show tooltips on hover
- Add detailed information that appears when hovering

****Remember:**** Even a simple dashboard with a table and a few filters looks professional. Start with the essentials and add more visuals if you have time!