

## Lecture 28, Nov 22, 2021

### Comparison Matrices/Pugh Charts

- Pairwise comparisons across all different metrics, relative to a single reference alternative/benchmark
  - Change reference if it doesn't tell you much, e.g. if for a particular critical metric, one alternative is worse than all others, then using that alternative is a bad benchmark
- Columns are alternatives and rows are metrics
- Each entry is whether the alternative is better than the benchmark or worse for that specific metric
- At the end of it, argue for the recommended alternative in words; the matrix does not tell you what the best alternative is
  - Think about “what do I do next”?
    - \* Change reference design
    - \* Reconsider whether metrics are useful
    - \* Re-divergence
    - \* Analyze patterns for linked metrics
    - \* Look at metrics that are weighted more and figure out if they can be broken down
    - \* Look at metrics that are weighted less and figure out why they're there
- Don't sum up the table
- Decision making tools are representations of your candidates that enable comparison