

Lecture 20, Oct 26, 2021

SCAMPER

- SCAMPER works best from a Morph Chart, or at least a deconstructed reference design; instead of aspects think of actions that a design needs to do
- SCAMPER is for building on existing designs
- SCAM:
 - Substitute: Are there approaches that should be substituted for others in this design? What if we changed ?
 - * Acknowledge that an existing approach can do two things
 - Combine: Are there actions/aspects that should be combined into one approach?
 - * Collapses multiple rows of the morph chart into one
 - Adapt: Are there approaches that could be adapted to address other aspects/actions?
 - * Same but opposite direction as combine
 - * Change one approach to make it work for two actions
 - Modify/Magnify/Minimize: If you select a specific approach and emphasize it (change the focus), what effect will it have on the other aspects/actions?
- PER:
 - Put to other uses: What else can these approaches do that's unrelated to what we're trying to do? How might that change what is created?
 - Eliminate: What if an action/aspect wasn't necessary? What if a constraint wasn't present?
 - * If the problem is overconstrained, this can be helpful in opening it up
 - * Can also be used to shave redundant features
 - * Removes a row of the morph chart entirely
 - Reverse/Rearrange: What if aspects/actions were completed in a different order?