

DT-week-4

L1 Silent Brainstorming

- create a lot of ideas → in silent brainstorming
- try to write something down in such sessions, documentⁿ, externalizⁿ

L2 TRIZ Intro. & Applicⁿ

- documentⁿ, categorizⁿ → 40 ways can solve any problem
- TRIZ → Theory of Problem solving (Russian Acronym)
- Copying, universality, segmentⁿ → there are total 40 such principles

L3 Solve Merge Ideas into a Concept

- confluence → ideas get together (merge them) ⇒ finally, create a concept. Finally, pitch the concept altogether

L4-7 Puzzles

- ID Card - Soluⁿ uses fingerprint
- Little Grid - Use benevolence of ground
- How to steady your camera?
- Jogging - You want to run, but you don't have. Identify the conflict of interest here.

L8 Human Factors in Design

- we design for people to use, what if dinosaurs evolved further?
- But, people are people. We have to design the process they are, not the way we wish them to be in future.
- We have to understand human needs, capabilities and behaviour and design to accommodate these. Address cultural aspects as well.

- User experience - how should the product be used, what happened during use.
- Feedback - the concept of feedback. Good vs poor vs excessive feedback.
- Error messages vs help to complete the task.
- Provide help to enable the task.
- Other issues - time lag associated with a feedback, expectaⁿ of doneⁿ, how to address.
- the model of a product and how it impacts user experience.
- the concept of human error - boring envt., long hours, sudden precise action, multi-tasking, legal req. vs human experience, errors must result in minimal to no damage.
- A design that takes human factors into account is more likely to succeed in the long run.

L9 Understanding TRIZ

- forty inventive principles (kind of trigger) - segmentaⁿ, taking out, local quality, asymmetry, merging, universality, nested (russian) doll, anti-weight, blessing in disguise, preliminary anti-action, preliminary action, before-hand cushioning, equipotentiality, other way around, curvature, dynamics, partial or excessive action, another dimension, mechanical vibration,