Co-creation and Co-design with a Create-a-Thon

Work in Progress

⚠️This document is work in progress.

Description

A CaT is a tool to help facilitate the practice of Inclusive Design. It's goal is to engage a "full diversity of potential users", a key principle [Insights] in the practice of Inclusive Design, in the design process. In essence, a CaT is a diverse community of co-designers (or co-creators) brought together to contribute to the collective design of a system, product or service. Inclusive Design practices include: accessibility integration from the start, open work, a focus on functional needs and preferences, frequent testing, inclusive facilitation, design for adaptability and flexibility and design for uncertainty.

A CaT may also be considered as collective creativity or participatory design (Wikipedia page on Participatory Design), all of which are fundamentally a process that includes both the expertise of system/product/service designers/researchers and the situated expertise of users (those impacted by change to or creation of new systems, products and services). (Sanders and Stappers).

A CaT aims to create an environment that encourages input from diverse perspectives. "In keeping with the edict 'nothing about us without us', this principle is about including a diversity of people with a broad range of needs, preferences, interests and skills into the design process, and in so doing, weakening [blurring] the distinction [line] between user and designer." source: https://guide.inclusivedesign.ca/insights /DiverseParticipationAndPerspectives.html

A CaT should encourage active involvement from users or potential users of the system, product or service being iterated upon—the key is to have involvement of a diversity of users, users whose needs aren't met, users whose needs are constantly in flux; users whose insights are not available elsewhere because they do not fit into a construct of "average".

CaTs can be applied at as many points as possible in the design process. To practice inclusive design there should be several touch points throughout a design process, and not simply at the beginning. To design inclusively it is important to review progress with and have input from a CaT community at multiple stages.

A CaT intends to:

1. identify problems in a given context
2. develop ideas and stories, and
3. use these ideas and stories to inform the design of systems, products and/or services (any and all mediums of design can be applied here).

Collecting, sorting and applying information generated at a CaT aims to maintain all individual contributions as important as the other. They are a collection of perspectives that contribute to robust and agile solutions rather than reductive practices of data analysis that contribute to a concept of an "average".

User Stories and Personas

Collecting and applying participant stories generated at a CaT should aim to maintain all individual contributions to be as important as the other. Participant stories are a collection of perspectives that can contribute to robust and agile design solutions. The structure of the CaT should be designed to facilitate individual story gathering and the preservation of individual stories by providing multiple opportunities to create, critique, reflect, and iterate. It is important to avoid reductive practices of information analysis; avoid distilling stories to a collection of averages and eliminating individual differences in favour of sameness.

Individual stories can help counter-balance personas.

Personas (behavioural models of potential stakeholders) are created by "considering the needs, interests and daily tasks of non-obvious or untraditional users helps a design team to think broadly and stay open to unpredicted uses of the systems they are creating" (**source of this quote?**). However, person as as sole user-representation can lead to stereotyping or the fictionalization of an non-traditional user. A CaT aims to counter-balance representations (like personas) with the the understanding that individual stories don't *represent* the voice of the user, they *are* the voice of the user. Therefore, participant stories are fundamental to the practices of co-design and inclusive design.

Create-a-Thons and Hackathons

CaTs are "short term collaborations between small groups", similar to a Hackathon (also refer to https://handbook.floeproject.org /InclusiveMakingAndHacking.html). A Hackathon commonly appeals to the "technical" end of the spectrum either by focusing on digitally-based design solutions or engineering physical artifacts. A CaT aims to be broader than a traditional Hackathon in that it encompasses all forms of design mediums (industrial, interior, graphic and digital) and seeks to generate ideas and stories that inform the shape of a solution rather than attempting to create a solution or an artifact.

Create-a-Thon In Practice

When to consider using a CaT:

- the design problem space is ambiguous, not well defined, or complex.
- there is a broad audience who would benefit from your finished product / service.
- proposed solutions are not harmonious (i.e. satisfying one criteria, negatively diminishes another).
- there are many possible design directions and unsure what to focus on.
- there is a potential of bias
- when an individual or small group is considered the "experts"

Goal: Use a CaT to help gather ideas, stories, perspectives that give you possible directions for further exploration.

Setting up a CaT

Step 1: Define a broad problem space

Starting with an end goal in mind, create a broad problem space which encompasses your goal. Start with a broad problem space as it encourages creative thinking which may generate more robust solutions and new possibilities (serendipitous discovery and virtuous cycles). A more general problem space would also appeal to a broader audience which can give deeper insights into established demographics, or new insights into under served members.

For example, if a goal is defined as "increase museum gift shop receipts by 10%" and solicit ideas and solutions based on that scope, you may find solutions related to changing prices, or improving inventory. Also the study may attract only people with relevant retail experience.

If the problem were defined more broadly as "discover why guests do not visit the museum gift shop", the ideas you get may be more interesting and useful for broader applications (i.e. "Baby strollers can not fit between the retail shelves" may lead to better accessibility throughout the facility). Implementing solutions based on such perspectives may help you toward the goal of 10% sales increases, as well as broader beneficial impact such as higher customer satisfaction. Also the broader problem space makes room for a larger demographic to participate.

Step 2: Come up with some Scenarios to Aid Exploration

While it is desirable to have a broad problem space and scope, there will need to be some structure to help participants. Without some structure in place, the process may be chaotic, participants confused, and the outcomes may not be as useful. To bring some order and help focus the collaboration, create one or more scenarios in which participants will work from.

In the museum gift shop example one possible scenario might be "It is a school trip day at the museum and the museum is busier than usual, what are some ways to draw visitors into the gift shop?".

The number of scenarios will largely depend on the problem, the number of participants, and the available time.

It is recommended that some dry runs of the scenarios be done to strike the right balance between collaboration, reflection, and fun.

Step 3: Find some participants

The goal of the CaT is to generate a variety of participant stories and perspectives. Therefore aim for participation from a broad audience not just the people who fit the contextual definition of "average" - find participants from a spectrum of ages, gender, vocation, cultures, and ability.

Step : Communication

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  - Give sufficient detail and time and correspondence.

Step

- Observe and facilitate co-creation
  - Record with video and photos (consent required)
  - Participants themselves can also be given tools and opportunity to document their thoughts and observations

Step

- Give opportunity to individuals to reflect and document their personal "stories", designs, thoughts using multiple modalities (some examples may include scribbing/drawing, keyboard typing, voice recording or voice to text. https://guide.inclusivedesign.ca/practices/CommunicateMultimodally.html)

Step

- Give opportunity for individuals and groups to refine and iterate on their ideas.

Step

- Give opportunity for groups and individuals to inspire each other through the presention of ideas.

Step

- Ensure the pacing is sufficient, with appropriate breaks.
  - Don't try to do too much. Be respectful of time.

Step

- Build a good relationship with participants to allow for future opportunities

Case Study: IDRC-PhET Energy Skate Park Create-a-Thon

The Energy Skate Park sim is a challenging sim because:

- The user is free to position the skater anywhere within the playing area.
- When the skater is released,

PhET Energy Skate Park Simulation

- PhET Energy Skate Park co-design framework

Tips:

- Consider a CaT at all stages of your design process. "Co-creation can take place at any point along the design development process: pre-design, discover, design, make [iterate]" (Sanders,Elizabeth B.-N, and Pieter Jan Stappers. Convivial Design Toolbox. 1st ed. Amsterdam: BIS, 2014. Print.).
- In keeping with the core of the goal of Inclusive Design—flexibility and adaptation—always be developing a community of co-designers, and invite new potential users at every stage to build out diversity of perspectives.

Bibliography

Sanders, Elizabeth B.-N, and Pieter Jan Stappers. Convivial Design Toolbox. Amsterdam: BIS, 2014. Print.!DIgeneral1234

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