



beyond consultation

Creative methods for
engaging consumers and
clinicians in co-design

acknowledgement of country

I respectfully acknowledge the Traditional Custodians of the lands on which we meet and recognise their continuing connection to land, water and community.

I pay respect to Elders past, present and emerging, and I recognise that these lands have always been places of teaching and learning.

the plan

who, what & why

methods buffet

methods for *immersing*

methods for *exploring insights*

methods for *generating ideas*

methods for *prototyping solutions*

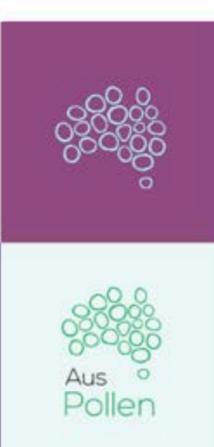
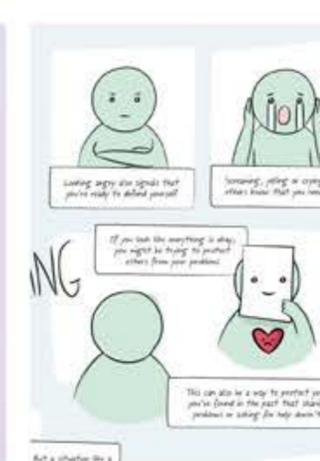
project case study

potential benefits & blunders

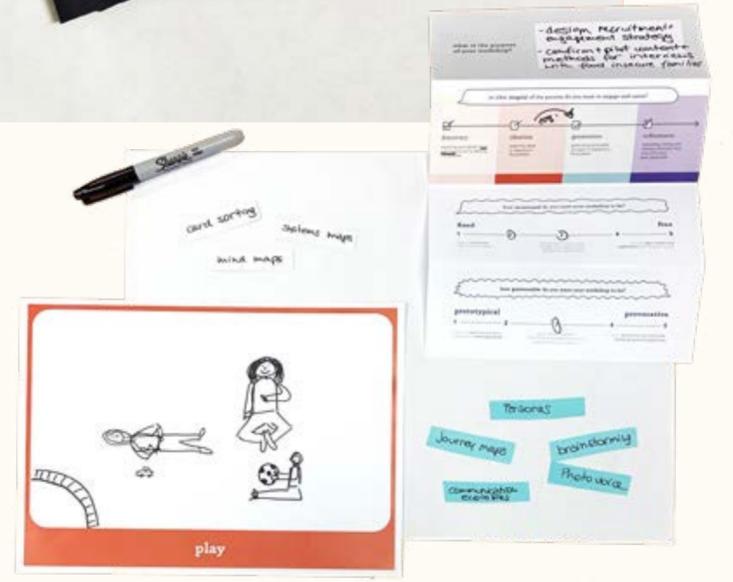
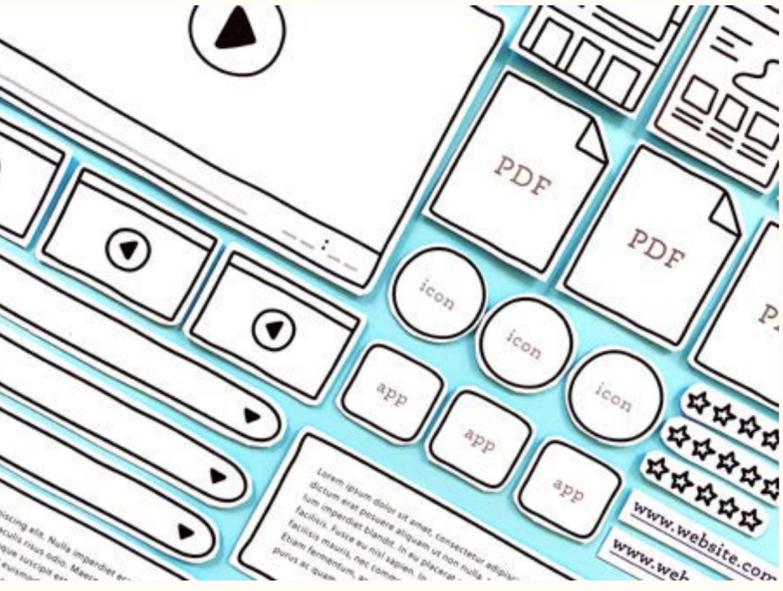
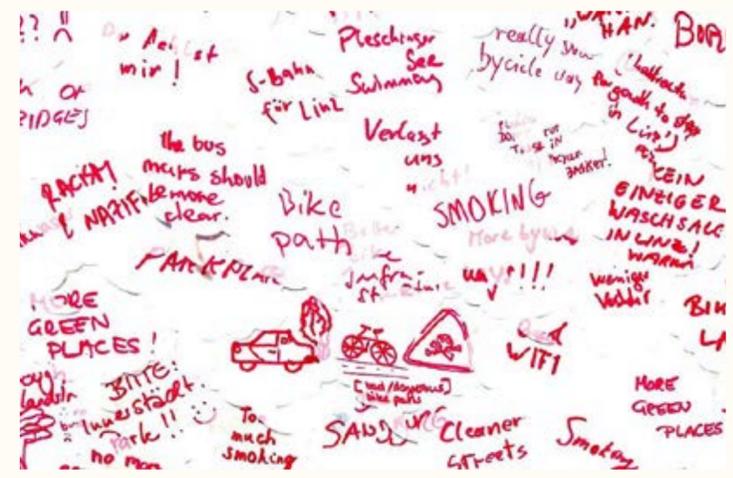
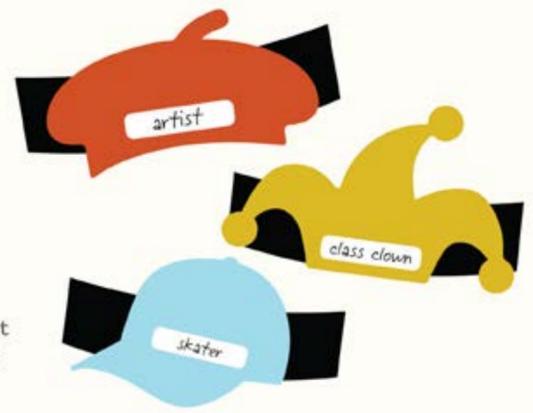


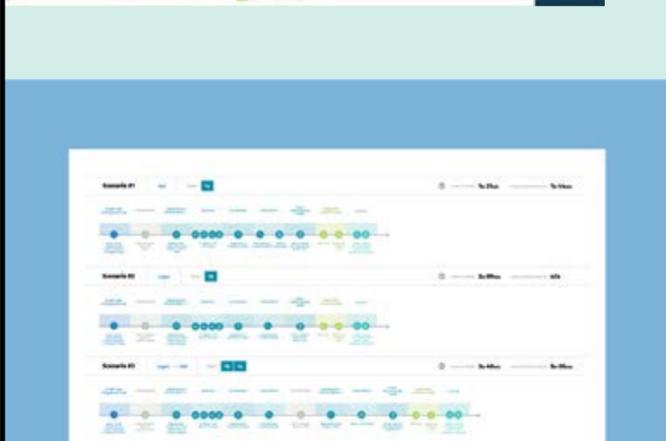
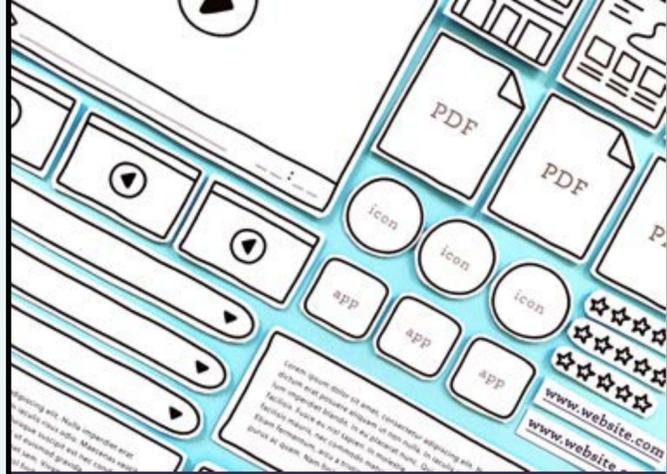
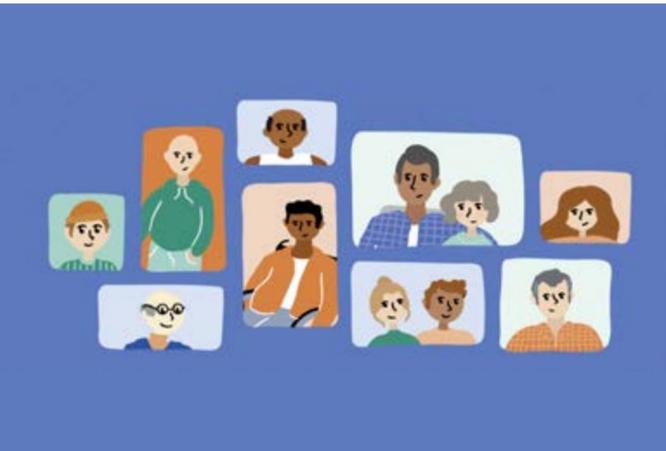
who, what & why











Care companion
High Benefit Care at End of Life

VOICeD
Statewide Diabetes Clinical Network

Cancer Wellness Initiative
PA Hospital

Statewide stroke mapping
Statewide Stroke Clinical Network

First 100 days of JIA
QCH Rheumatology

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Creative methods for
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the spectrum of engagement

consultation

collaboration

codesign



extractive

empowering

(VicHealth, 2019; Voluntary Service Overseas, 2004)

the spectrum of engagement

“We will keep you informed, take on your feedback and let you know how it was incorporated in what we decided to do”

consultation

collaboration

codesign



extractive

empowering

(VicHealth, 2019; Voluntary Service Overseas, 2004)

the spectrum of engagement

consultation

collaboration

codesign

extractive

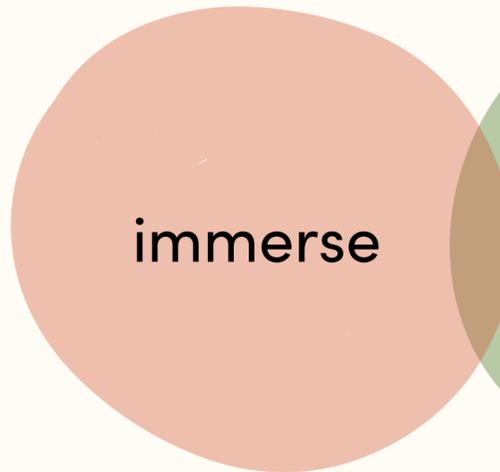
empowering

“Let’s work together to understand and solve this problem from start to finish”

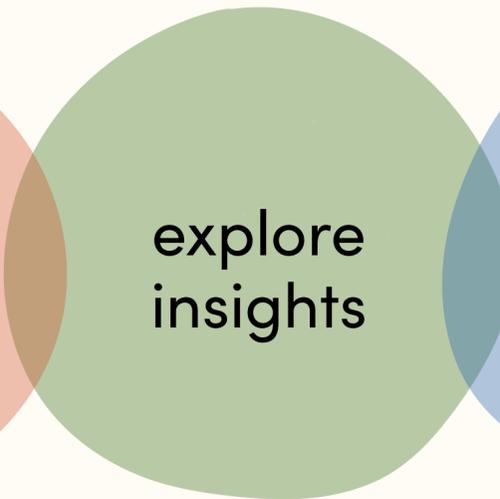
(VicHealth, 2019; Voluntary Service Overseas, 2004)

the co-design process

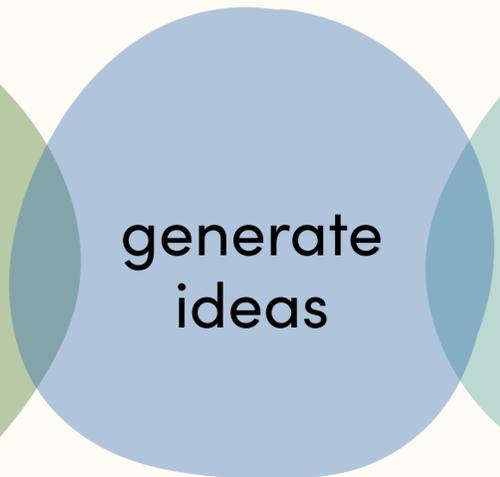
**current
reality**



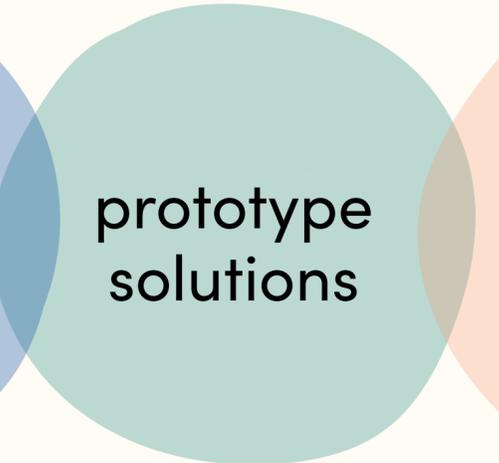
immerse



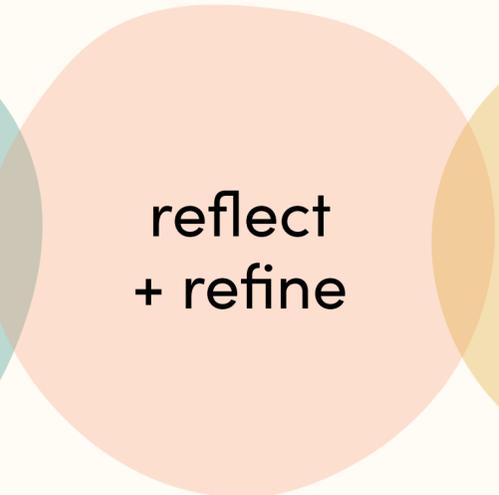
explore
insights



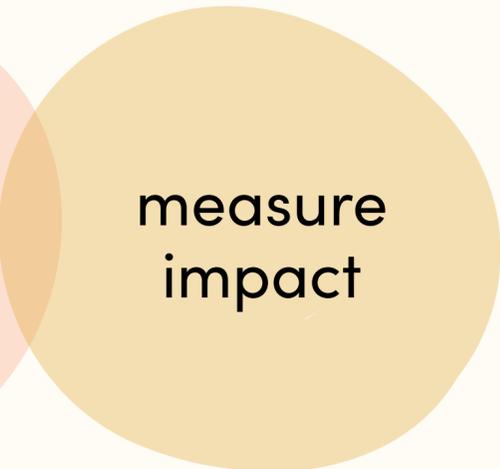
generate
ideas



prototype
solutions



reflect
+ refine



measure
impact

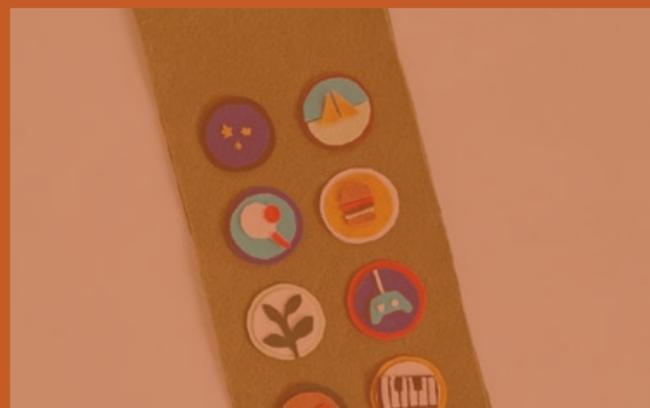
**new
reality**

beyond consultation

Creative methods } for
engaging consumers and
clinicians in co-design



Borrowed from the world of Design (*Experience Design, Interaction Design and HCI*), these methods are designed to incite imaginative play and collective dreaming, exploring current and future possibilities in a way that is meaningful, engaging and empowering.

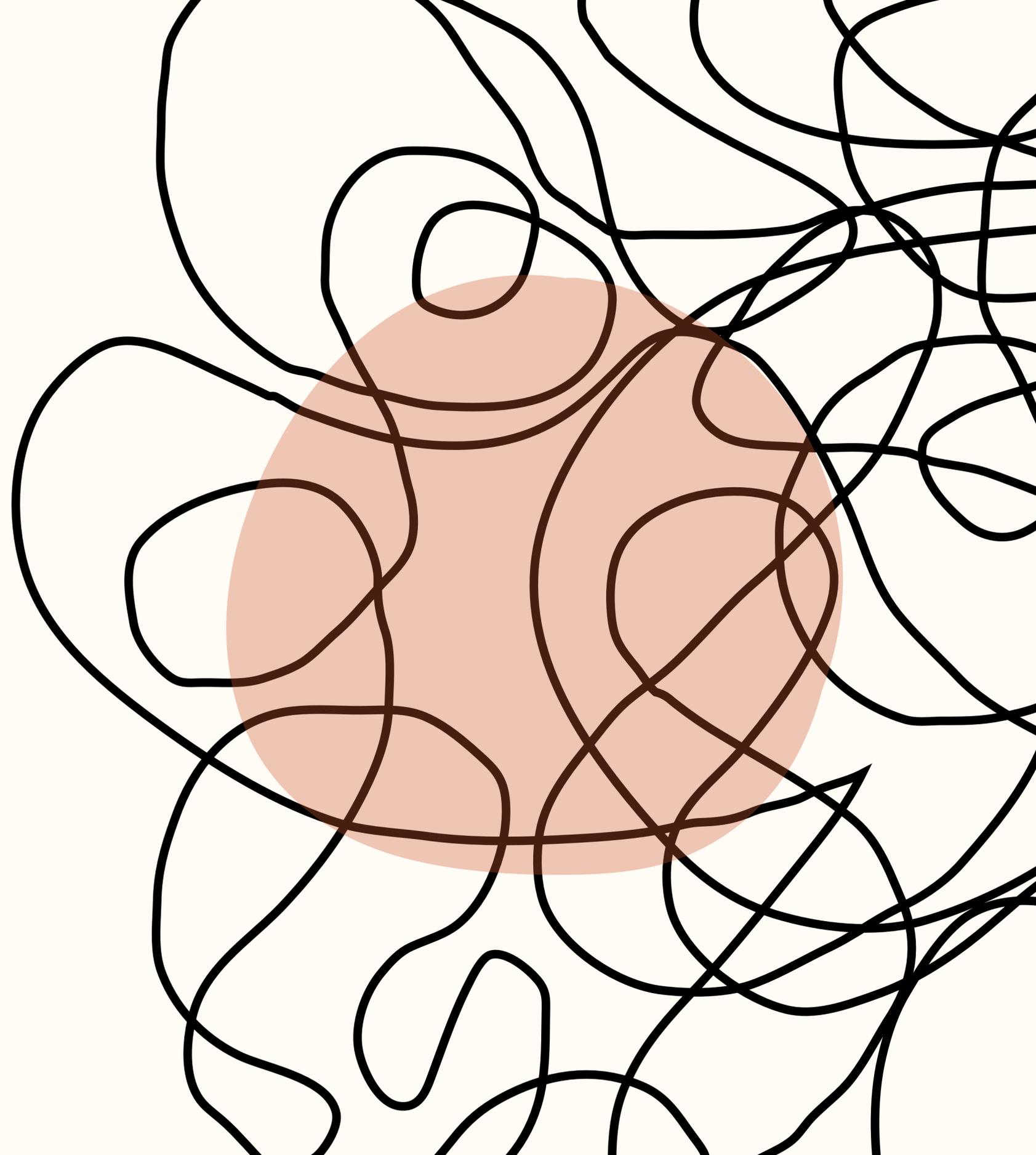


healthcare
is full of

wicked problems

Problems that are difficult or impossible to solve as they involve diverse stakeholders, are ever-changing and are not clearly defined.

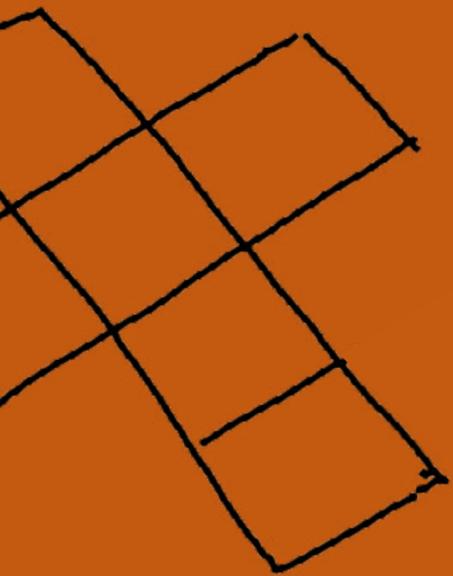
(Rittel & Webber, 1973; Crowley & Head, 2017)



**By definition, wicked problems
can't be treated with traditional
approaches – those which are linear,
analytical and definitive**

(Rittel & Webber, 1973)

Therefore, health professionals are increasingly looking to designers for novel participatory methods to engage clinicians and consumers.



Play is “not just mindless entertainment,
but an essential way of engaging with, and
learning about, our world and ourselves –
for adults as well as children”

(Gaver, 2009, p.3)



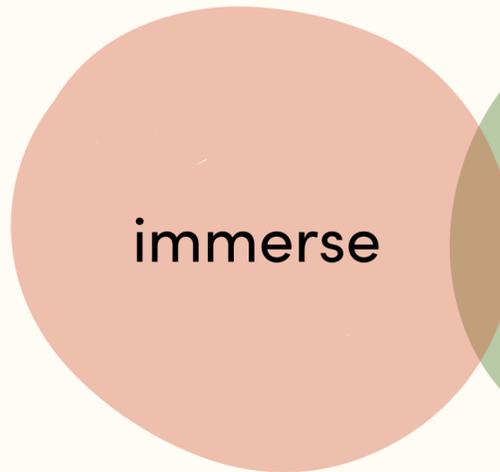


methods buffet

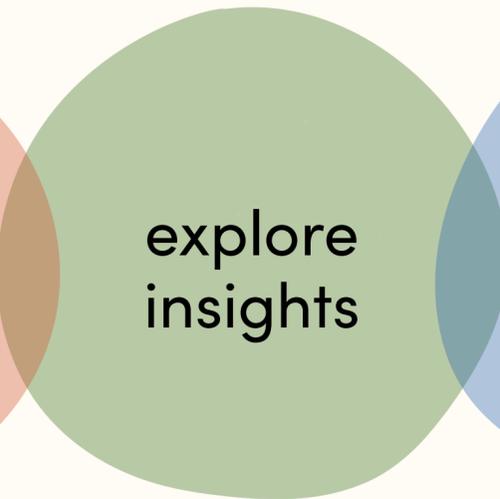


the co-design process

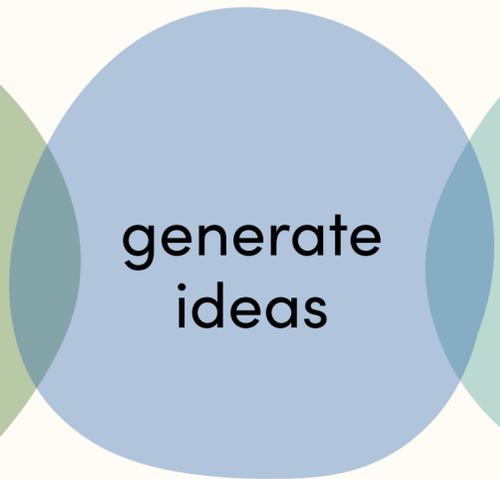
**current
reality**



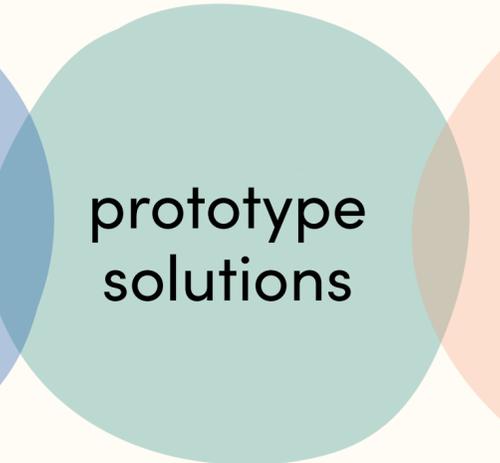
immerse



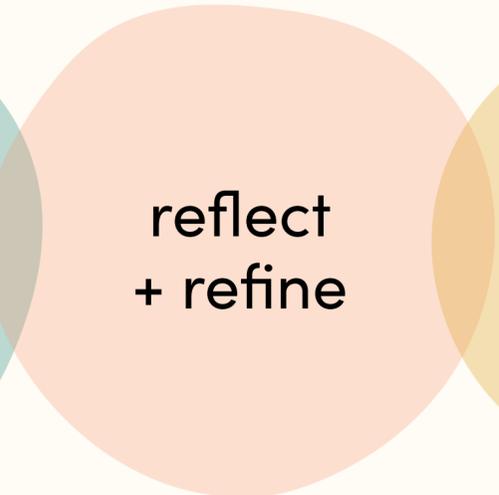
explore
insights



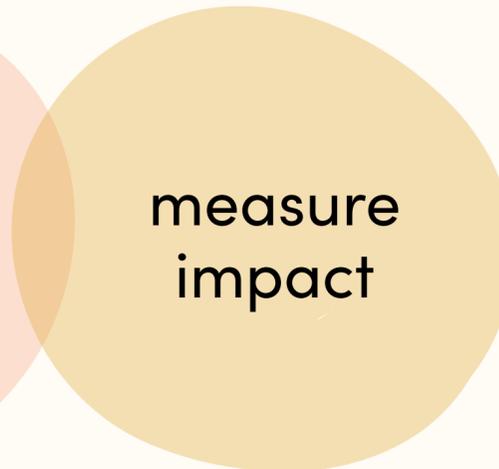
generate
ideas



prototype
solutions



reflect
+ refine



measure
impact

**new
reality**

these methods can be used to...

**current
reality**

immerse

explore
insights

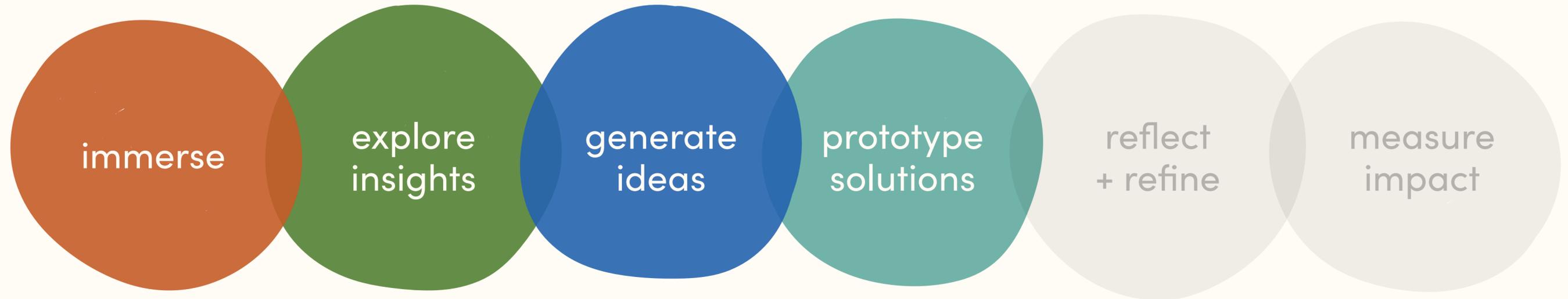
generate
ideas

prototype
solutions

reflect
+ refine

measure
impact

**new
reality**



methods to
immerse

These methods are designed to capture and explore lived experience, generating rich qualitative data.

Common methods:

- Interview
- Survey
- Observation/shadowing



cultural probes

Tools for self-documentation, sent to end-users' home environment or relevant context to be completed individually or in groups.

- an alternative to more traditional, consultative methods of user research from the social sciences
- elicits inspirational responses and insights into end-user needs, sensibilities and experiences
- unintrusive (and covid-friendly!) data collection
- high cost, effort, knowledge and time required

(Gaver, 2007; Mattelmäki, 2006; Sanders & Stappers, 2014, ProbeTools n.d.)



Probes that explore eating in the home

Catherine Legros & Benjamin Chan



GRIPE INCIDENT REPORT Date: ___ | ___ | ___

Where did the gripe come from?

Place: Phone Person: Parent(s)
 Email Patient
 In person Staff member
 Other Me (Jenny)

Other details
 e.g. place (if other), staff member role, age and stage of the patient

What were the gripe(s)?
 e.g. they never heard back about rescheduling their appointment



First 100 days of JIA
JUVENILE IDIOPATHIC ARTHRITIS

Jessica Cheers

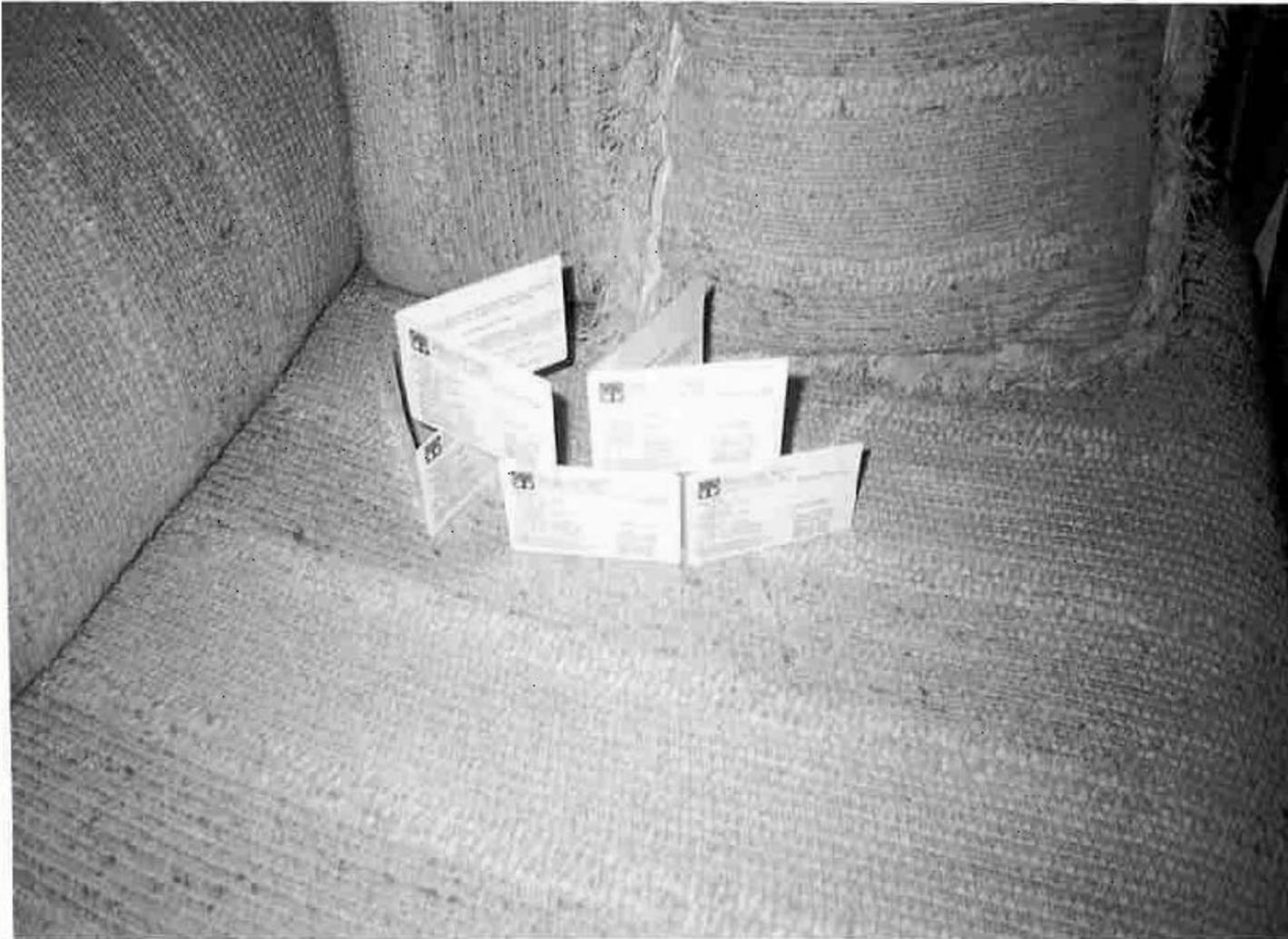


photovoice

Participants are tasked with taking photos to document their experience around a chosen topic.

- unintrusive (and covid-friendly!) data collection
- results in a wealth of evocative visual data
- low cost method

(Wang & Burris, 1994; Catalani & Minkler, 2010)



Female to Male Transsexuals' Experience of Health Care Access

Wendy Hussey

'House of cards'

"My little house of cards is what I call it. I got these five cards in the space of three months from the same insurance company. First, they said that I didn't have insurance, then they said that I did have insurance but it was with this primary care physician. Then they said 'no it's a different primary care physician and you have a different subscriber number, we can no longer use your social security number because that is someone else's social security number'..."

(Hussey, 2006)

'The gown'

"I wanted to represent that this is what I have to wear when I am going to have testing done, and it makes me very uncomfortable. I am very vulnerable . . . I was in this gown with nothing else on which is the first thing that puts a transsexual at a great disadvantage, and feeling very uneasy . . . So again, I can be who I am as long as I don't have to take my clothes off, and I don't have to be examined"

(Hussey, 2006)





body storming

Similar to play acting, the team use their own bodies to physically experience a situation in order to better understand it. This can work “in situ” or in a simulated environment using props.

- works well in sensitive contexts where it is not appropriate to witness or document end-users engaging in the activity
- cheap and easy!
- an important step in creating a physical understanding of the problem space among the team, which can be validated by end-users



Co-designing a healthcare insurance experience

Cantina

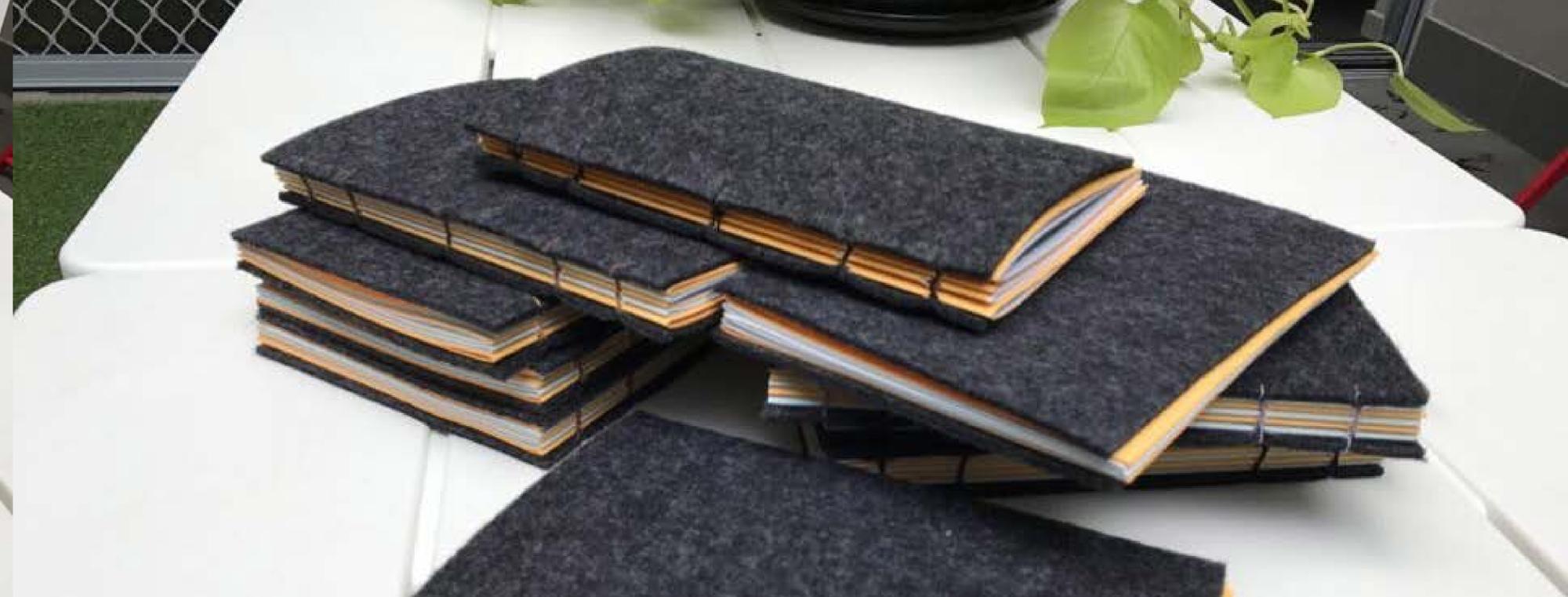
methods to

explore insights

Common methods:

These methods are designed to unpack the complexities of an experience after immersing in the problem space and collecting initial data.

- Thematic analysis
- Journey mapping
- Personas

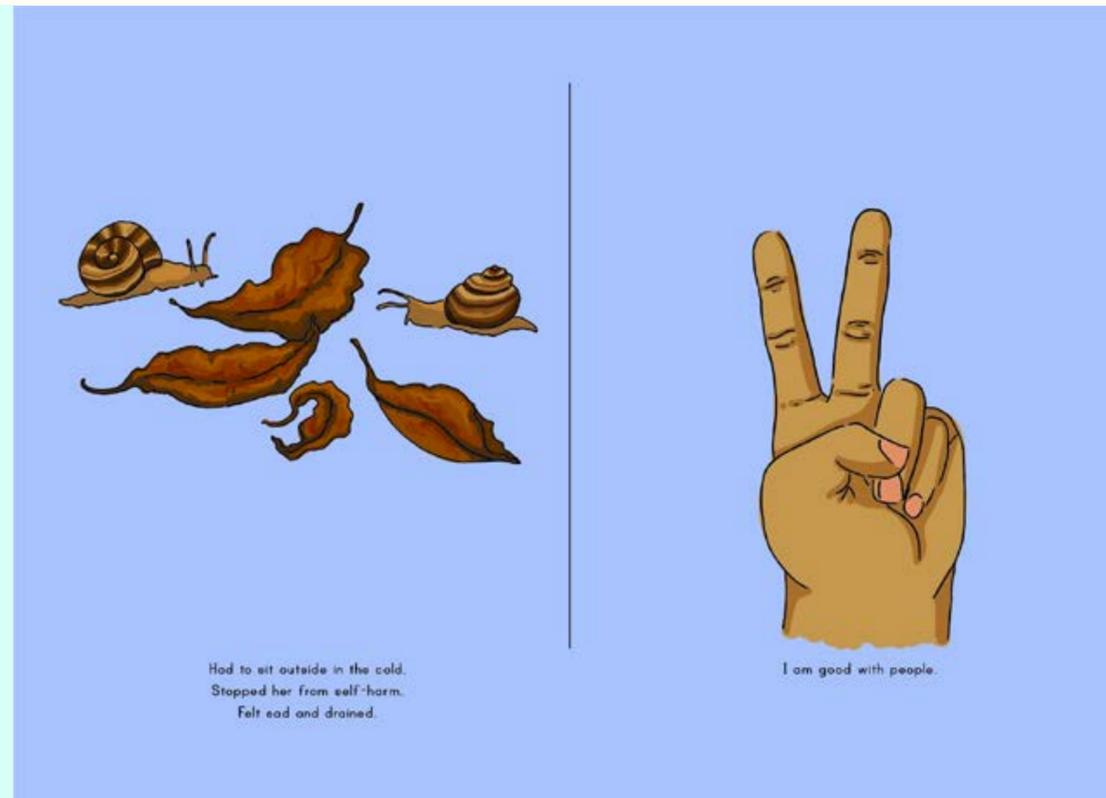
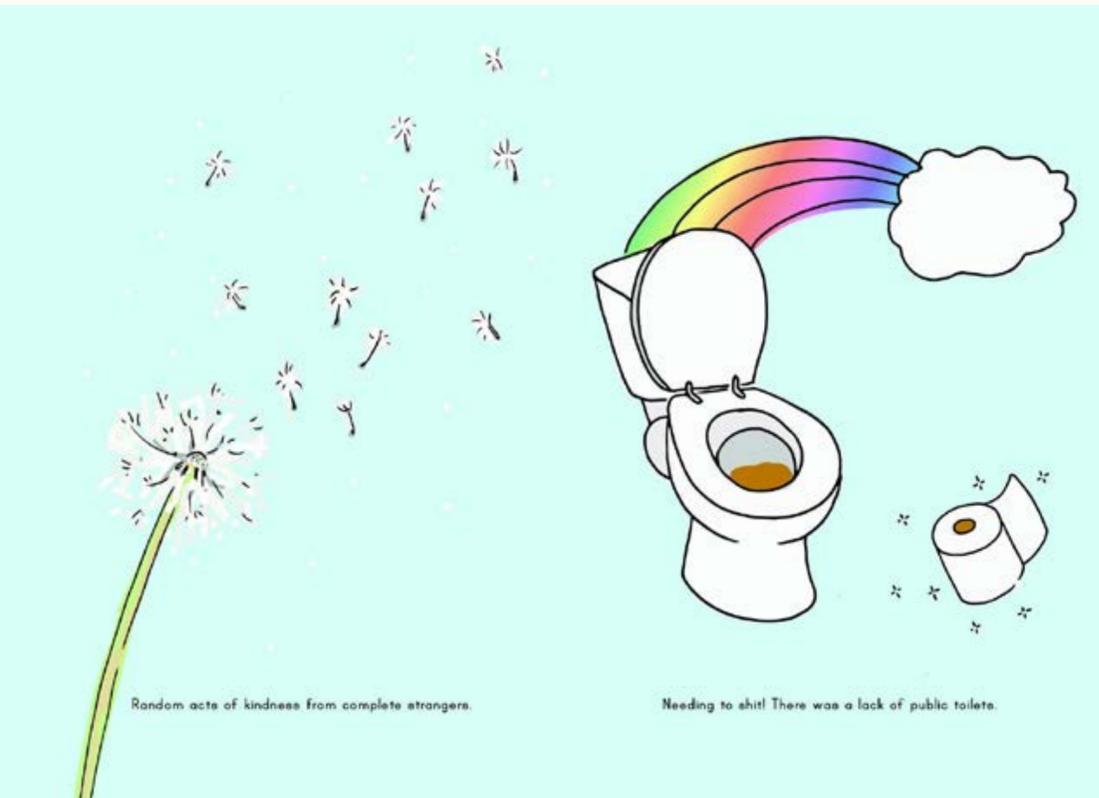


storytelling artefacts (?)

Participants' stories from the *Immerse* phase are presented back to them in a new format, confirming that the story has been accurately understood, communicating appreciation for their story and prompting further discussion.

- depending on its form, may require a designer/illustrator
- highly personal and valuable to participants

(Choi, Yule & Green, 2010)



Dignity First - Co-creating Tomorrow **HOMELESSNESS**

Dr Jaz Choi, Adele-Charmay Yule & Alice Brown



Understand and critique
the *current situation*

Weekly diary + Journey mapping



Envision imaginary Utopian
and Dystopian futures

Collages



Consider *short-term* actions
to work towards Utopia

Post-it clustering

VOICeD

TELEHEALTH

Jessica Cheers

methods to

generate ideas

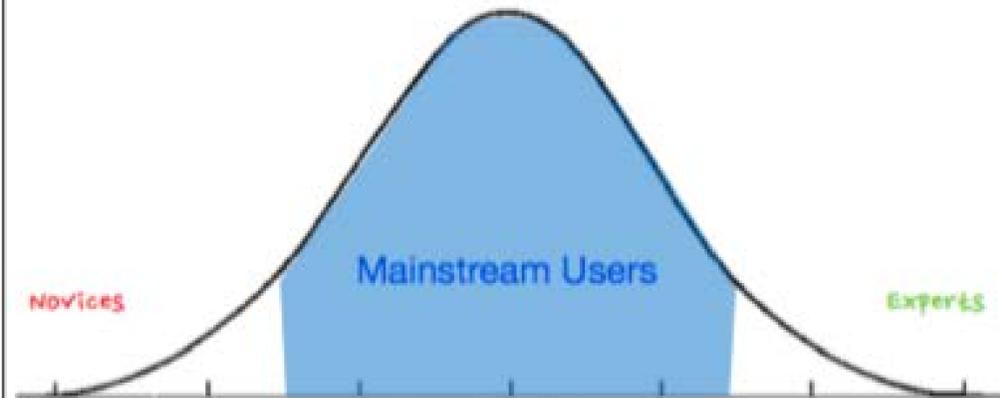
These methods encourage participants to imagine, explore possibilities and generate ideas in response to the problems identified.

Common methods:

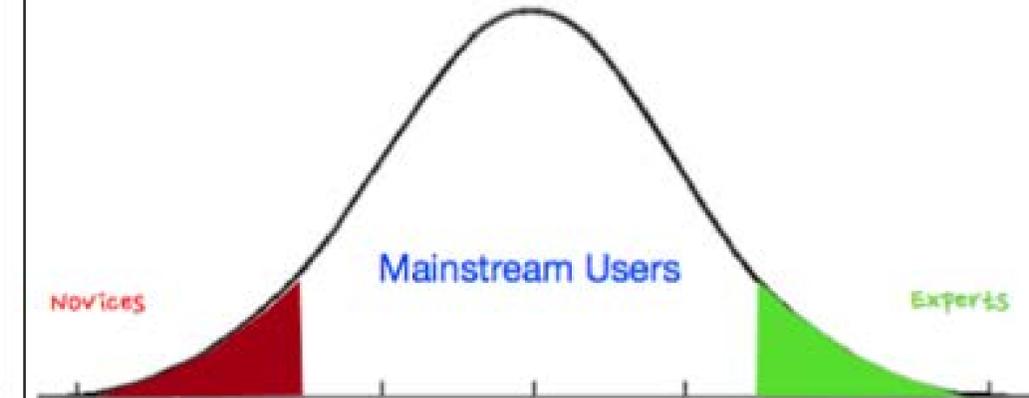
- Brainstorming
- Post-it clustering



**The best ideas rarely
come from *the mean*.**



**They come from the
EDGES.**



extreme characters

Instead of trying to represent a realistic target user (using methods like personas), try designing for an “extreme” user with exaggerated traits.

- has the potential to inspire innovative solutions
- brilliant for re-framing the problem space
- extends on existing personas

(Djajadiningrat, Gaver & Frens, 2000; Strachan, 2017)

generate ideas

User Demography:

user's ethnicity, gender, language, age,
physical challenges

Use Environment:

weather, space, sound

User Interactions

physical, sensory and cognitive variables like
visual, auditory, memory, physical strength

**An Extreme User approach to
identifying latent needs**

MEDICAL DEVICE DESIGN

Sujithra Raviselvam, Subburaj Karupppasamy,
Kristin Wood & Katja Hölttä-Otto

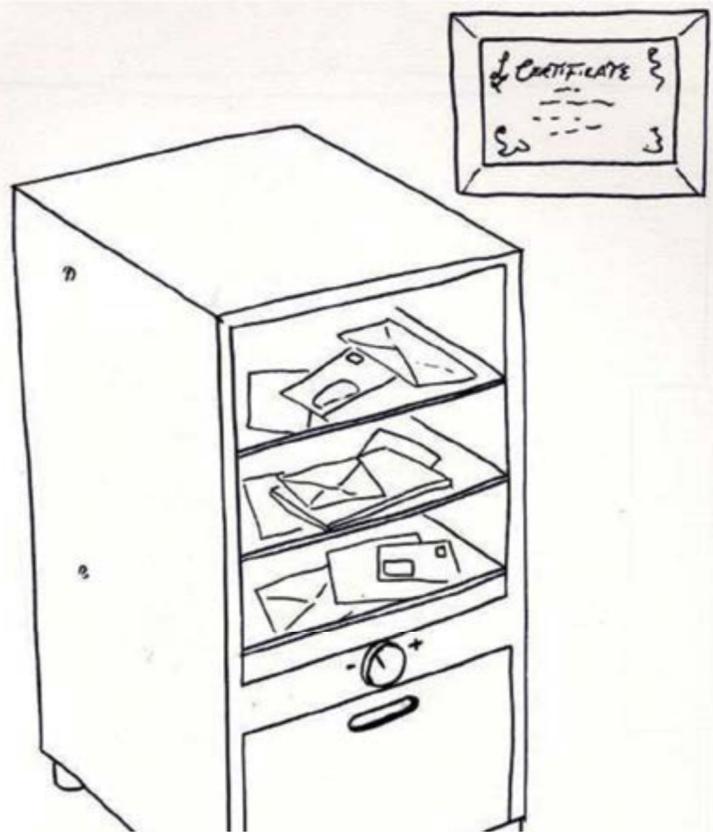
“The Pope is a person who is very powerful in theory, though in many ways his actions and emotions are prescribed. He is very much restricted by protocol. He sees his formal appointments as tedious and valued his leisure time very highly. He enjoys a stroll in the Vatican gardens and the conversations with his favourite nun. When it comes to his formal tasks, the Pope needs a little encouragement from time to time.”

Methods for Exploring Aesthetic Interactions

APPOINTMENT MANAGEMENT SYSTEM

JP Djajadiningrat, WW Gaver & JW Fres





critical artefacts

Create a series of fictitious and provocative (often ridiculous) solution to the problem(s), presenting them to participants as prompts for exploration, discussion and ideation.

- can be developed to any level of fidelity
- may require a designer
- needs to be clearly contextualised due to its absurdity

(Bowen, 2007)

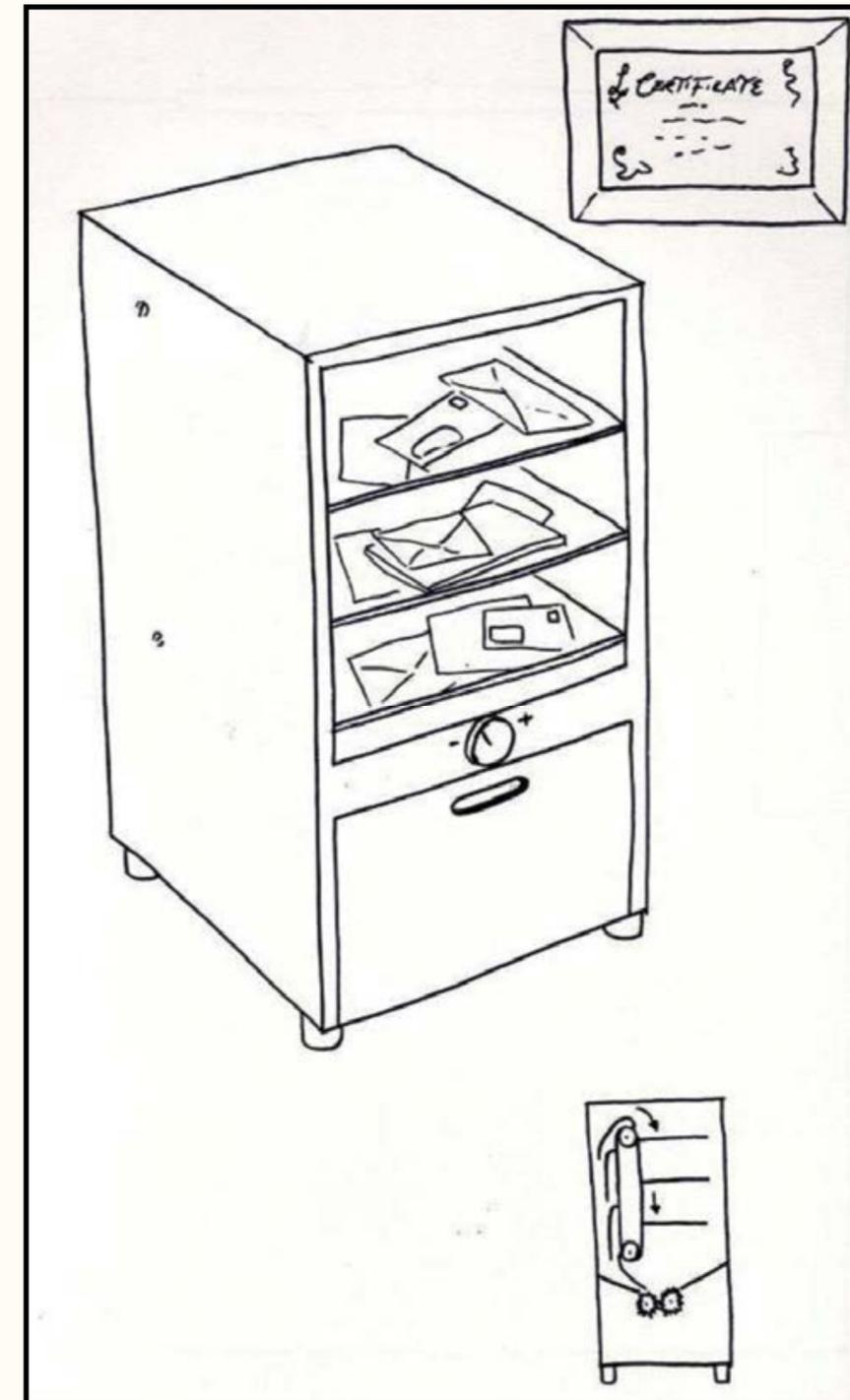
generate ideas

Living Room

AGEING IN THE HOME

Simon Bowen

In response to the issue of clutter in the home, the “Prioritiser” concept was created – a machine in which incoming letters were placed on a shelf, with the most important items on top. Over time the shelves descend, meeting a paper shredder when they reach the bottom of the machine.



Designing with pre-users of medical devices

DIABETES

Janet Kelly & Ben Matthews

Designed for people with diabetes who have difficulty constantly assessing their blood sugar, blood pressure and cholesterol and understanding why these values have changed, the *critical artefact plate* indicates how “healthy” the food is with a three colour system.



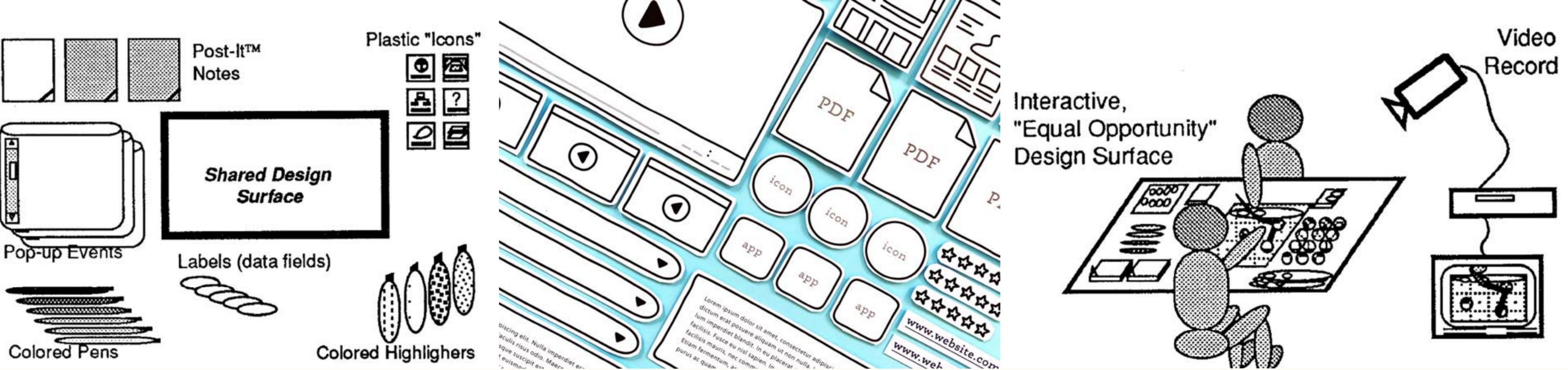
methods to

prototype solutions

Common methods:

The methods encourage participants to test and discuss solutions to the problem.

- Prototypes
- Mock-ups
- User testing

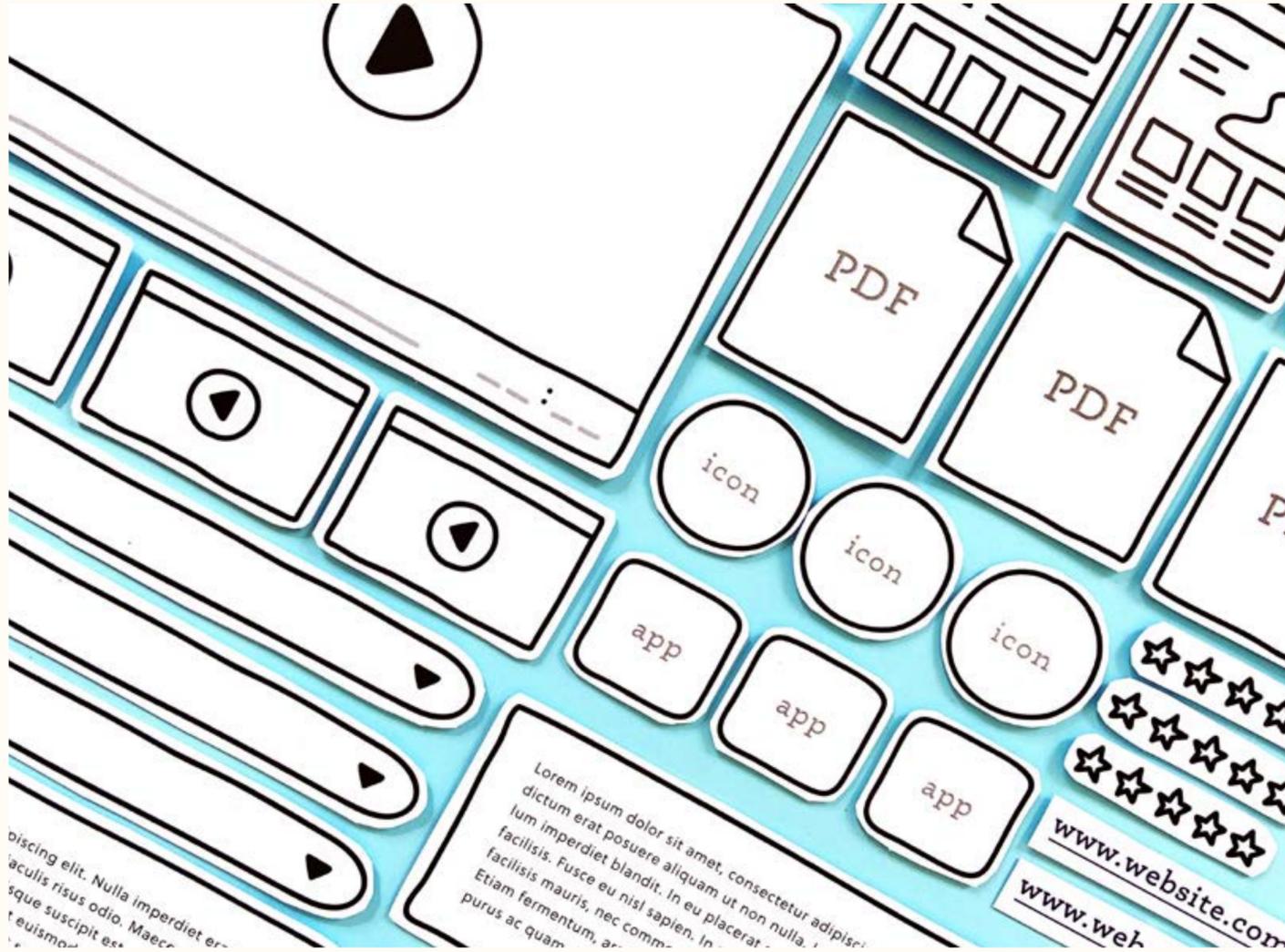


PICTIVE

Plastic Interface for Collaborative Technology Initiatives through Video Exploration involves using low-fidelity system components (made from paper, office supplies, etc) to collaboratively prototype design solutions which are video recorded.

- a quick and low cost way to represent ideas
- can take a long period of time, and often requires its own session
- prototypes can be used to act out the use of potential solutions

(Muller, Wildman & White, 1994)



Cancer Wellness Initiative
WEBSITE DESIGN
Jessica Cheers



Role playing games

There are a number of different methods in which character descriptions and/or props are used to act out the use of a potential solution. This can occur in a workshop setting, or with users are going about their day-to-day life.

- prototypes can be made in varying levels of fidelity
- a more playful and collaborative approach to user testing
- allows for reflection-in-action
- playing a role outside of themselves can make some participants more comfortable in sharing their ideas, while others may be uncomfortable

(Muller, Wildman & White, 1994; Iacucci & Kuutti, 2002; Brandt, 2006)



SPES

Create a simple mock-up of a device and observe the user as they use it as part of their daily activities.

(Iacucci & Kuutti, 2002)



Interface Theatre

Participants act out scenarios while playing the role of scripted system components (e.g. "Marty the menu bar"), giving the audience permission to critique the system design throughout.

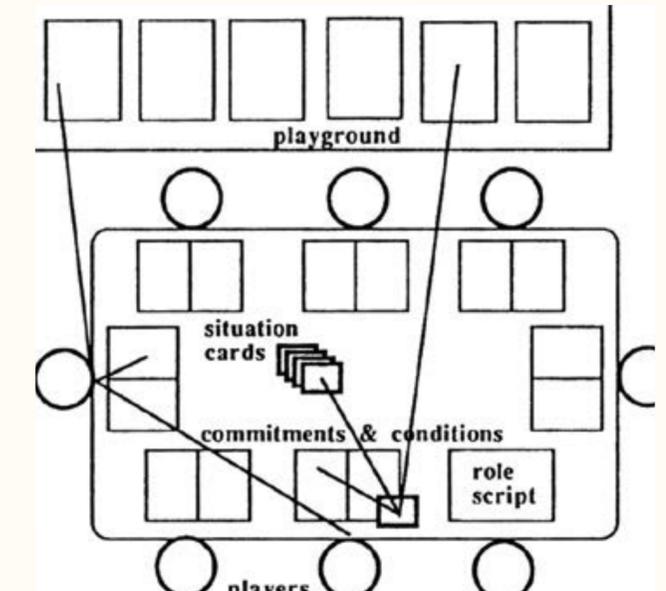
(Muller, Wildman & White, 1994)



Character Game

Scenarios and characters are built based on personal stories, then characters roles are appointed to participants which they play out in response to scenarios.

(Vaajakallio, 2012)



Design-by-playing

In the *Desktop publishing game*, participants are assigned workplace roles, then "situation cards" are used to present scenarios which at least one person must commit to addressing.

(Ehn, Mölleryd & Sjögren, 1990)

Pitch a PATIENT GROUP

We think that a VOICeD clinic should be established for _____
PATIENT GROUP

1. WHO	2. HOW	3. WHY	4. WHAT IF?
<p>The practitioners that this patient group regularly attend appointments with are...</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div> <p>The three most suitable practitioners for a virtual multidisciplinary team would be...</p> <ol style="list-style-type: none"> _____ _____ _____ 	<p>Which of these two statements are true?</p> <p><input type="checkbox"/> There is already a multidisciplinary clinic in CQHHS that includes these practitioners</p> <p><input type="checkbox"/> There is not already a multidisciplinary clinic in CQHHS that includes these practitioners, but we could support this collaboration by...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p>Patients who are suitable for VOICeD could be identified using the following factors:</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<p>Needs VOICeD would address the current needs of this patient group because...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p>Existing opportunities Existing opportunities that would make VOICeD easy to establish include...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p>Impact We think that VOICeD would positively impact this patient group because...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<p>What are the potential barriers to establishing a VOICeD clinic for this patient group?</p> <p>Barrier: _____</p> <p>We would overcome this barrier by...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p>Barrier: _____</p> <p>We would overcome this barrier by...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p>Barrier: _____</p> <p>We would overcome this barrier by...</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>



Pitch a patient group

VOICeD CENTRAL QLD

Jessica Cheers



Desktop laser printer

Pelle Ehn



Co-Design Machine

Jessica Cheers

immerse

cultural probes
photovoice
bodystorming

explore insights

storytelling artefacts
future workshop

generate ideas

extreme characters
critical artefacts

prototype solutions

PICTIVE
role playing games

methods overview

things to note:

- 1 The line between methods and tools can get blurry.
- 2 These methods can be used at other stages of the design process.
- 3 None of these methods are overly prescriptive.
Take what works, leave what doesn't - experiment and document.
- 4 This is NOT AT ALL an exhaustive list, but hopefully an interesting one!



project case study



immerse	explore insights	generate ideas	prototype solutions	reflect + refine	measure impact
Reflective tools to capture learnings	Follow-up interviews with probe recipients	Role play games	Role play games	Iterative design	Evaluation survey
Video interviews	Storytelling artefacts	Workshops	Workshops	Process analysis	Communicate learnings
Evaluation survey	Workshops	Extreme characters	Mock-ups	Implement final outcomes	
Cultural probes	Thematic analysis		A/B testing		
Bodystorming	Personas		PICTIVE?		
Waiting room experience	Journey mapping				
	Scenarios				
Planning workshop					



potential benefits & blunders



**potential
blunders
*of playful,
creative,
subversive
& exploratory
methods***

The transition to remote collaboration can be clumsy or impossible for more hands-on methods

Many of these methods are reliant on having the right number of people with specific lived experiences in the room

Not all methods are right for every project or participant group

Inspiring a playful disposition in a room with pre-existing power dynamics can be tough

Some methods may not be immediately accessible for those who experience disability or impairment or are neurodivergent

Limitations of time, money, access to design expertise, etc.

**potential
benefits
*of playful,
creative,
subversive
& exploratory
methods***

Offer new ways of exploring complex problems

Provide both information and inspiration

Create a democratic and creative space

Expand the world of possibility from “what is” to “what could be”

Produce rich and evocative documentation of lived experience

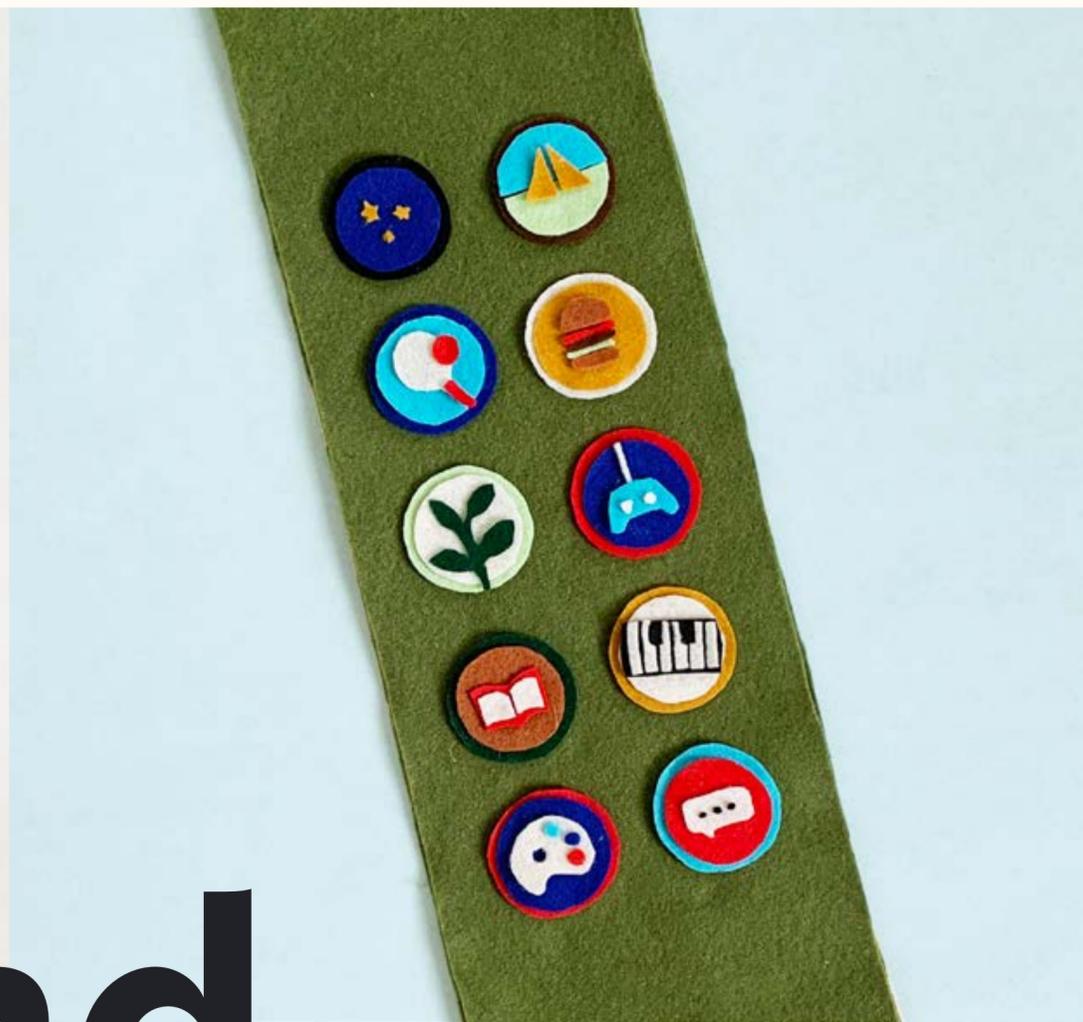
The “personal touch”

**thank
you!**



jessica cheers
HIU Experience Design Fellow

jessica.cheers@health.qld.gov.au



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