

For public servants who are designing, procuring
or managing human-centred design projects

Human- Centred Design Playbook

Version 1.4







Foreword

Government has a responsibility to our citizens to continuously improve. From looking at how we work internally to providing more seamless service to citizens, we are constantly designing ways to be better.

The public service does great work. In order to make real change for Victorians, our design process needs to reflect and serve their needs.

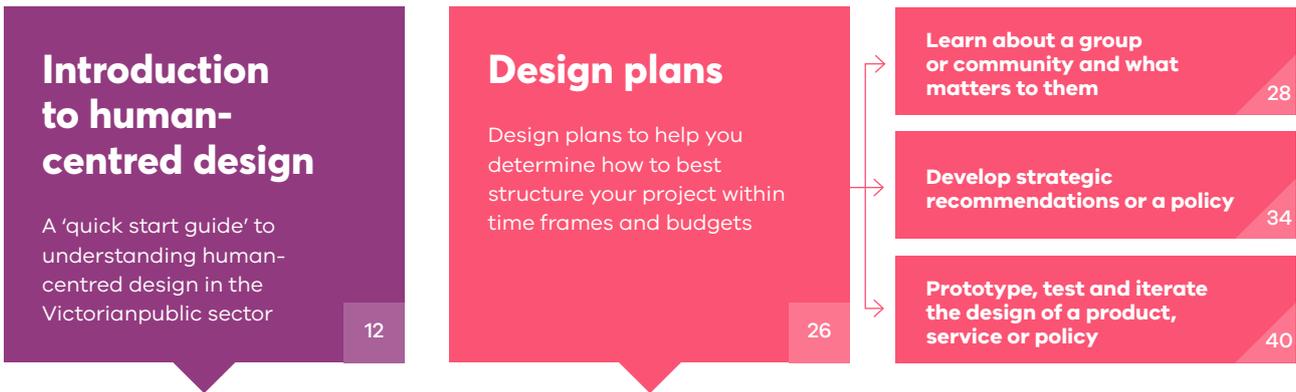
This guide brings together key ideas showing how we can integrate human-centred design into our work in government and build the capability of public servants. It's aimed at empowering everyone working in the Victorian Public Service to do work that truly serves the Victorian public, moving us toward a more inclusive and innovative public service.

Gavin Jennings

Special Minister of State
Government of Victoria

How to use this guide...

You can start in any section, depending on your needs. If you're new to human-centred design we recommend you start from the beginning. The introductory content is an overview of human-centred design within the Victorian government. The design plans provide guidance to inform an RFQ, assess a response to an RFQ and describe varying design-led project structures by assembling the methods and outputs that follow.



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How and when to use this playbook

This guide is for public servants who are designing, procuring or managing human-centred design (HCD) projects.

It was developed for use by public servants who are new to HCD practice. It will help you collaborate better with the service design team from the Digital, Design and Innovation (DDI) Branch, service designers in your department and external design agencies.

It's structured to get you up and running quickly and can be used in several ways.

Scoping and planning a project

This guide can be used as a starting point for when you're planning and scoping design-based activities. It can help you structure a project by providing an understanding of common approaches, time frames and budgets for HCD projects.

Procuring an external design agency

This guide can help you understand the type of design project you need. It describes typical deliverables to include in your request for quote and may be useful when assessing responses from design agencies; their methods, proposed outputs and price.

Increasing your design literacy

Non-designers can use this guide during a project to help them feel informed and have better conversations with design practitioners and to validate approaches suggested by a supplier.

Precedents and case studies

It provides VicGov case studies, references and evidence of application to help determine whether an HCD approach is right for your work and make the business case for taking a design-led approach.

Why use this playbook?

There are many HCD playbooks, guides and toolkits available. This guide is unique because it was written for the context of the Victorian public sector. It seeks to demystify the HCD process by combining HCD methods and outputs into a set of suggested project plans. It does some of the thinking for you via the guidance on assessing your options and practical steps for executing a project.

This playbook will help you incorporate an HCD approach into your work by introducing design processes, costs, time frames and what outputs to expect.

Digital, Design and Innovation branch

The Digital, Design and Innovation branch (DDI) is tasked with helping the Victorian Government transform. This work relies on strong trust, open collaboration and the courage to do things differently.

DDI is home to a diverse team, with experience from large corporate, start-up, not for profit, academia and public sector. We have a range of skills and capabilities, all bound together around a common purpose: to provide value to the Victorian Public Service (VPS), and all of Victoria, through better design and solving problems together.

We have the opportunity to reimagine what the future of public service could look like. To redesign the high-value services that citizens already use in a way that reflects their needs.

We're not just digitising existing processes for efficiency. We are exploring alternate perspectives and pathways, embedding a mindset of possibility, creativity, opportunity and abundance.

At DDI, we develop tools and capabilities that connect citizens and government. Our work covers common platform solutions, community engagement and co-design, standards and governance for accessibility, usability and easy discovery, and support for citizens trying to navigate government information and services.

Some of our work is in hard technologies such as software, resources and platforms. Other work is in soft technologies such as processes, strategies and technical concepts. The human-centred design playbook is one of these soft technologies that help public servants better engage citizens and inform policy.

Co-design is a key part of how we work. This playbook was developed with and for our VPS colleagues through a consultative and co-design process.

It is for the public servant who wants to take a more user-centred approach to designing their programs, policies and services.

We hope it plays a significant a role in your work by helping you to define real life problems and find their solutions.

Jithma Beneragama

Executive Director
Digital, Design and Innovation Branch
Department of Premier and Cabinet

www.medium.com/digital-government-victoria





Why does change need to happen?

'We're dealing with a more sceptical, less trusting public. Partly this is because their expectations of our politics are so focused on new initiatives, new announcements, or new plans. The issues cycle has become more compressed, with less credit being given to governments for just doing what they say they'll do and doing it well. But it's also because the electorate is more educated, more discerning and more demanding than ever before when it comes to openness, transparency, accountability and involvement. The zeitgeist has changed. Citizens are more capable and more confident. They want our democracy to be more democratic.'

Chris Eccles AO Secretary
Department of Premier and Cabinet

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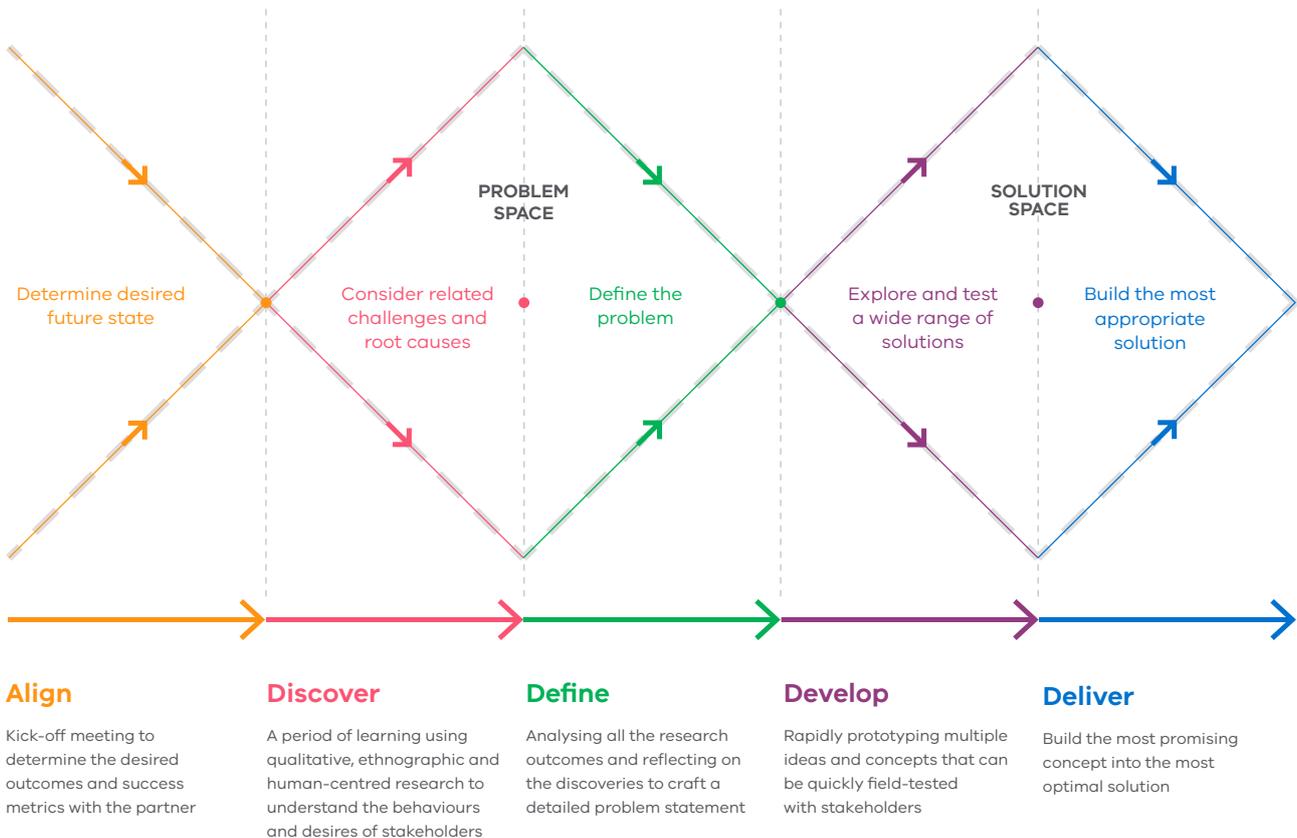
Tickets



Introduction to human-centred design

Introduction to human-centred design

Our design process



What is human-centred design?

Human-centred design (HCD) is an approach to problem-solving that puts the people we are designing for at the heart of the process.

The human-centred design process begins with empathy for the people we are designing for. The process:

- generates a wide variety of ideas
- translates some of these ideas into prototypes
- shares these prototypes with the people we're designing for to gather feedback
- builds the chosen solution direction for release

The goal of employing human-centred design is to develop solutions that meet the needs of Victorians.

Human-centred design is an iterative practice that makes feedback from the people we're designing for a critical part of how a solution evolves.

By continually validating, refining and improving our work we can discover the root causes of knotty problems, generate more ideas, exercise our creativity and arrive more quickly at fitting solutions.



Why use human-centred design?

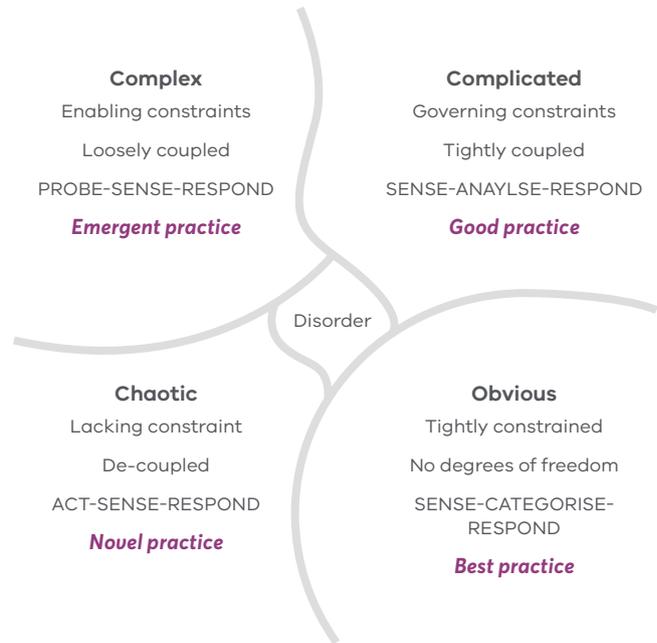
An HCD approach aligns government services with the needs and desires of people. Involving end users in the overall design process leads to greater buy-in, uptake and impact.

Benefits for the people of Victoria

- Improved policy, services and products that help address the needs of Victorians
- Reduced transactional friction when using government products or services
- Reduction of thought overload when determining how to use government services

Benefits for the government of Victoria

- Provides a citizen perspective of the problem at hand (an outside-in approach)
- Reduces the risks of a 'failed' policy, product or service through validation
- Paints a clearer picture of the wider context in which the problem lies
- Reduces costs by building more targeted systems and services that meet the needs of people
- Creates a positive reputation and increased trust in government through greater engagement
- Can increase productivity and improve operational efficiency
- Builds organisational resilience through an agile and iterative process
- Helps the VPS understand the Victorians affected by their decisions



The Cynefin framework

Public sector problems are different

As public servants, our aims are generally geared toward improved social outcomes, which differs greatly from the financial aims of private entities. Because our aims are different, the way we measure success is also different.

Victorian public sector challenges:

- serve diverse, poorly resourced and vulnerable populations
- engage multiple stakeholders who share decision-making power but hold different or conflicting interests.
- deliver services more than products
- deliver at scale from the beginning to reach a large population of beneficiaries
- compliance have high standards for privacy and safeguards
- create long term change within time-bound administrative periods and priorities

With these things in mind, we need to consider how human-centred design is employed differently in the Victorian public sector, taking greater care in the early stages of discovering and defining the problem.

Thankfully there are various frameworks we can use during the act of 'problematizing' that are aligned to HCD principles.

The Adaptive Leadership model

One of these frameworks is Heifetz and Linsky's Adaptive Leadership model, which describes challenges as either adaptive or technical.

A technical challenge can be resolved with subject matter knowledge and experts (such a building a bridge).

Adaptive challenges are dynamic, unpredictable, seemingly irrational and they require new learning and change in beliefs. Victorian public sector challenges are more adaptive than technical, due to the social dimensions mentioned above.

The Cynefin framework

Another model is the Cynefin framework (pronounced kuh-nev-in) by David Snowden. This framework helps sort challenges into five categories: obvious, complicated, complex, chaotic or disorderly, and outlines what response is best suited to each category.

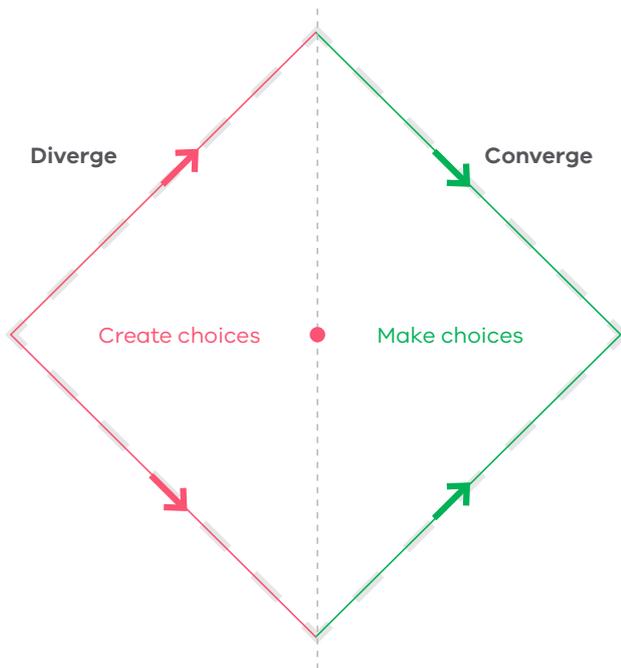
Many Victorian public sector challenges fall into the complex category, particularly as they are multi-stakeholder, ever-changing and need to account for human behaviour, emotions and habits.

This makes them more dynamic than those that fall in the complicated category, where problems may be more technical and predictable.

Like the Adaptive Leadership model, the Cynefin framework describes how complex challenges require a probe sense respond approach.

What these approaches share

Adaptive Leadership, Cynefin and HCD approaches share is belief that fully understanding and appreciating the problem is the most important part of the work, requiring a commitment to an experimental and learning mindset.



The design process

Divergent and convergent thinking

The design process, based on the Double Diamond framework by the UK Design Council, has periods that are divergent and convergent. Divergent periods, such as Discover and Develop, are for trying many approaches: asking 'what could be' and being open to where the work might take you without deep review or analysis.

Convergent periods, such as Align, Define and Deliver, are periods of evaluating, articulating and making choices around what to pursue. Successful HCD projects dedicate a healthy amount of time for both divergent and convergent periods.

Due to the time pressures and limited resources in the Victorian public sector, we too often sacrifice the divergent periods of possibilities and commit quickly to a known solution, reusing past ideas not necessarily because they're the best, but because it's been done before.

This approach to project delivery stifles innovation as we fail to exercise our imagination. Recycling ideas for new contexts and problems can lead to diminishing levels of success and sub-optimal results.

Competitive organisations need to be adaptable, forward leaning and creative. The design process affords the opportunities and processes to take a fresh perspective on the problem and what's possible.

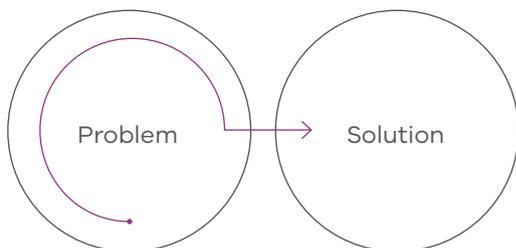




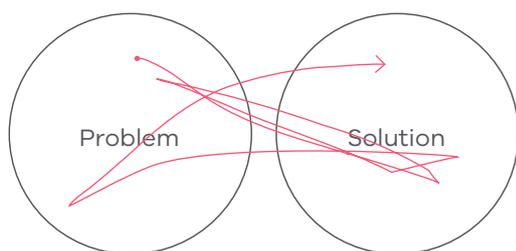
'We iterate because we know that we won't get it right the first time. Or even the second. Iteration allows us the opportunity to explore, to get it wrong, to follow our hunches, but ultimately arrive at a solution that will be adopted and embraced. We iterate because it allows us to keep learning. Instead of hiding out in our workshops, betting that an idea, product or service will be a hit, we quickly get out in the world and let the people we're designing for be our guides.'

Gaby Brink, Founder
Tomorrow Partners

Analytical approach



Design approach



Analytical and design approaches

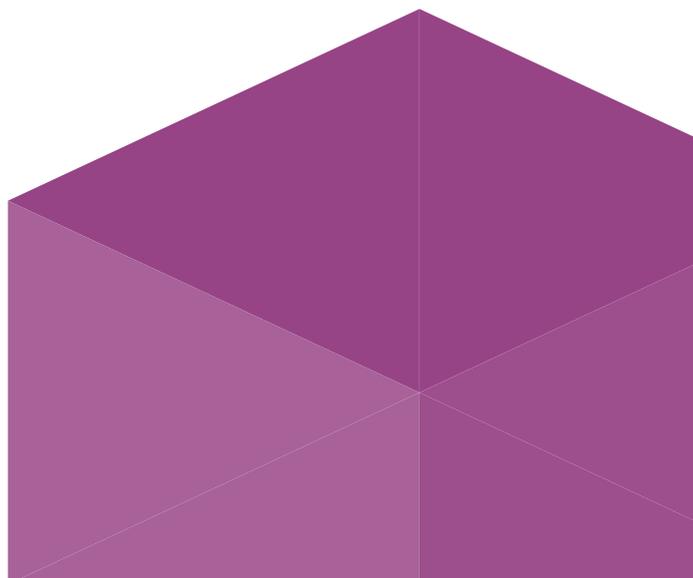
A traditional analytical approach is linear and requires a heavy investment early in the process during the deep analysis of a question, which then leads to a highly informed answer.

But what if the problem was misunderstood and framed the wrong way from the beginning? A lot of time and energy will have been spent discovering the root issues to the wrong question, leading to a highly refined but ill-fitting solution.

In the non-linear design approach, you spend the early stages of the process discovering the true problem.

Instead of over-analysing the problem from an expert mindset or an institutional understanding, the human-centred design process encourages you to hold a learning mindset and understand a citizen's experience. You quickly and cheaply test hunches and observe how the stakeholders react to your ideas and how the ideas fit the context. The intent is to allow the true problem to reveal itself as you validate or invalidate your assumptions, while developing a richer understanding of the context.

Once you've outlined the problem you can move just as quickly through the solutioning stages. This stage helps further articulate the question or problem as you begin testing various solutions. This is the essence of prototyping: accelerated learning about the problem and solution at the same time.



Reducing cost and increasing efficiency

You can use a human-centred design (HCD) approach to increase government efficiency in several ways.

Addressing the right problem

The HCD process provides stakeholders with a very clear definition of the problem to be addressed. Designing a program without an established and shared understanding of a problem can be extremely costly and time-consuming if it ends up solving the wrong or a non-existent problem.

Testing ideas cheaply and quickly

The HCD process avoids ‘big bets’ through rapid prototyping, iteration and A/B testing.

This is a major shift from the waterfall approach, which treats analysis, design and implementation as discrete and sequential phases in a project. In the waterfall approach, large resources are commonly dedicated to product or service development without user testing.

Using HCD, you get quick and frequent feedback from users as you go which reduces the financial and reputational risks of failure.

Reducing support costs

The more user-friendly a system is, the less time you need to teach users how to use it, which increases adoption. If HCD methods are performed thoughtfully, the system you’ve designed should be as frictionless and autonomous as possible, which means fewer complaints need to be handled and therefore less resources spent on customer service.

Building capacity and working across silos

As HCD often involves multidisciplinary teams, running a project in this way encourages working across department and entity silos and with a wide set of stakeholders.

Gathering input from many sources and cross-fertilisation of ideas helps to build capacity and social capital that can spill over into adjacent and future projects.

Engaged citizens

As public servants we aim to improve and empower citizens in their democratic life in Victoria. A HCD approach contributes to strengthening the relationship between government and citizens in specific ways.

Understanding the citizen perspective

As the lives, rituals and behaviours of citizens change so too will their needs. We need to understand the challenges faced by citizens to know how we can most appropriately respond. Understanding citizens’ perspectives informs policy- and decision-makers and can be translated into services and programs that citizens will engage with.

HCD is a means to develop a rich understanding of citizens experiences in order to increase program effectiveness by developing novel solutions or improving existing designs.

Improving citizen experiences

Products, services, systems and programs that are user-friendly, accessible and equitable create enormous benefits for Victorians. They save time and remove barriers to access, meaning citizens get the services and support they need, when they need it. An HCD approach ensures users can use services effectively and efficiently.

Risk and reward

Taking an HCD approach can feel risky – especially if it’s a new way of working. However, the core intent of HCD is to de-risk a project through a structured process that delivers more fitting solutions.

When you invest time at the beginning of a project to better understand the problem and users’ needs, you’re able to amend and fine-tune solutions while it’s still cheap and easy to do so. You’ll avoid overinvestment in ill-fitting solutions. It’s an effective and efficient approach that saves time, resources and effort.

Putting it into practice

The methods and tools in this playbook offer a starting point for planning and scoping your HCD project.

We provide descriptions, tips and budget and timeline expectations for common HCD methods and outputs. These methods will take you from framing up your design challenge to getting your solutions out into the world.

You'll probably use some of these methods two or three times and some rarely or never.

They'll get you into the habit of continuously advancing your work while keeping the community you're designing for squarely at the centre of your work.

Guiding principles of human-centred design

Engaging directly with members of the public may be new and challenging, particularly when working with vulnerable communities. In order to get the most out of HCD-led work we recommend approaching your work in the following ways:

Dignified

How do I value people as unique collaborators and honour lived experience, culture and strengths?

Attentive

How do I plan to attend to my own needs and others' needs?

Relational

How do I facilitate trust and a spirit of willing participation?

Truth-telling

How do I adopt authenticity and truthfulness, even when it's difficult?

Aware

How do I become aware of power and how do I discuss, negotiate and share it?

Trustworthy

How do I take care with the stories and information that are given to me?





Design plans

Design plans overview

This guide assumes that you're new to human-centred design and its practices. We recommend that you collaborate with seasoned designers to execute your projects rather than undertaking the design activities by yourself.

The design plans provide some structural guidance with suggested methods and outputs. These will help you to develop reasonable expectations as you write a request for quote or review a request for proposal from vendors – and simply feel informed when speaking with designers.

The design plans were developed with the understanding that you know your intention, your resource envelope (time frame and budget) and are trying to determine how to best structure your project to maximise the results.

The design plans are organised under three general categories, with several suggested options for activities and outcomes based on your time frame and budget.

Time has been estimated using a combination of best-practice and past experience.

Budgets have been estimated using a standard median commercial day rate of AUD\$1,500 per person per day for a senior designer. Undertaking a design-led project is a collaborative endeavour. Whilst the budget may cover the costs of designers or vendors it does not take into account the resources required from the client side in terms of assets and time of staff (FTE).

Design plans



Learn about a group or community and what matters to them

These plans are designed for when you want to work with people who are external to your organisation or department.

Time frame

Budget

Page



Develop strategic recommendations or a policy

These plans are designed for when you want to work internally in your organisation or department.

Time frame

Budget

Page



Prototype, test and iterate the design of a product, service or policy

These plans are designed for when you want to begin developing a solution.

Time frame

Budget

Page

Forced choice outcomes



PRACTICE CASE

Informed Cons

MUST DO THIS

- Establish a design team and define roles
- Understand the problem and user needs
- Identify the user needs
- Generate ideas
- Prototype and test
- Iterate and refine the design

Option 1	Option 2	Option 3	Option 4	Option 5
Uncover existing knowledge of best practice	Research with a focused group of users to improve a product or service	Research with diverse user groups to improve a product or service	Identify unmet community needs so that new products or services can be designed	
2–3 weeks	6–10 weeks	12–16 weeks	12–24 weeks	
\$20,000–\$25,000	\$60,000–\$80,000	\$150,000–\$200,000	\$200,000–\$250,000	
Page 29	Page 30	Page 31	Page 32	
Identify opportunities and develop untested design ideas	Co-design solutions with users	Identify opportunities, design and test a potential solution	Identify opportunities, design and test multiple potential solutions	Develop strategic recommendations for an existing product or service
2–4 weeks	8–10 weeks	8–10 weeks	12 weeks	12 weeks
\$20,000–\$25,000	\$60,000–\$80,000	\$80,000–\$100,000	\$100,000–\$150,000	\$100,000–\$150,000
Page 35	Page 36	Page 37	Page 38	Page 39
Document the basics of a design so that an implementation team knows where to start	Create complete low-fidelity prototypes that have been validated with users	Create high-fidelity designs of a product or service, ready for implementation		
6 weeks	8–14 weeks	10–20 weeks		
\$40,000–\$80,000	\$100,000–\$150,000	\$150,000–\$250,000		
Page 41	Page 42	Page 43		

Learn about a group or community and what matters to them

These plans are designed for when you want to work with people who are external to your organisation or department.



Uncover existing knowledge of best practice

Summarises existing knowledge around best practice in a given field.

Option 1
Time frame 2–3 weeks
Budget \$20,000–\$25,000

Pros

- Builds alignment on existing understanding of best practice

Cons

- No new knowledge created
- Relies on quality of existing research
- Relies on access to subject matter experts

How do I do this?

SUGGESTED METHODS

Expert interviews

Interviews with subject matter experts to document their understanding and capture questions for further research.

Page 56

Literature review, desktop research or landscape review

To supplement the understanding gained from interviews and look outside of existing internal or external networks.

Pages 61, 52, 60

Research synthesis

Ensuring that communication of insights is fit-for-purpose, given the audience of the work.

Page 66

What will I get?

SUGGESTED OUTPUTS

Insights report

Page 85

Research with a focused group of users to improve a product or service

Understand how a product or service that already exists might be improved to better meet the needs of the community or user group.

Option 2

Time frame
6–10 weeks

Budget
\$60,000–\$80,000

Pros

- Gains focused insight on a product or service

Cons

- May not cover diverse experiences of a service or product

How do I do this?

SUGGESTED METHODS

Expert interviews or stakeholder workshops

Interviews with subject matter experts to document their understanding and capture key questions for further research.

To uncover and document the known and potential issues with a product or service. Key hypotheses or questions from stakeholders should be identified here.

Page 56

Ethnographic research or user testing (x 16 participants)

Use ethnographic research for service design or user testing for product design to understand existing use of the product or service and identify pain points and opportunities.

Page 55, 73

Research synthesis

Ensuring that communication of insights is fit-for-purpose given the audience of the work.

Page 66

What will I get?

SUGGESTED OUTPUTS

Insights report

Page 85

Research with diverse user groups to improve a product or service

Develop a deeper understanding of how a product or service that already exists might be improved to better meet the needs of the community or user group.

Option 3
Time frame 12–16 weeks
Budget \$150,000–\$200,000

Pros

- Understands knowledge gaps before new research is conducted
- Gives confidence on the behaviours and needs around a single product or service
- Provides sizing of insights and opportunities through complimentary quantitative data

Cons

- Will not provide adequate understanding of multiple products or services
- Will not have quantifiable data to back up pain points or insights

How do I do this?

SUGGESTED METHODS

Expert interviews or stakeholder workshops

Interviews to uncover and document the known and potential issues with a product or service.

Key hypotheses or questions from stakeholders should be identified here.

Page 56

Ethnographic research or user testing (x 32 participants)

Use ethnographic research for service design or user testing for product design to understand existing use of the product or service and identify pain points and opportunities.

Page 55, 73

Survey (up to 1000 participants)

To understand the potential size or impact of issues identified in previous activities.

Page 72

Research synthesis

Ensuring that stakeholder questions are answered and that actionable recommendations for the product or service are arrived at.

Page 66

What will I get?

SUGGESTED OUTPUTS

Insights report

Page 85

Current-state journey map

Page 78

Personas

Page 88

Identify unmet community needs so that new products or services can be designed

Combine qualitative and quantitative insights to uncover unmet needs and opportunities across a suite of products or services.

Option 4

Time frame
12–24 weeks

Budget
\$200,000–\$250,000

Pros

- Understands knowledge gaps before new research is conducted
- Gives confidence on the behaviours and needs of the community
- Creates knowledge for use across multiple projects
- Sizes opportunities identified

Cons

- Insights may need translation for specific design projects

How do I do this?

SUGGESTED METHODS

Desktop research or landscape review

To ensure prior internal and external research is incorporated into research design and planning.

Page 52, 60

Expert interviews or stakeholder workshop(s)

To identify internal understandings of challenges and opportunities. Multiple workshops should be scoped, depending on the complexity of the stakeholder group.

Page 56

Survey or opportunity sizing

To gain quantitative data around a community or population's needs and behaviours. This may be done after ethnographic research in order to size pain points or opportunities identified through that phase.

Page 72

Ethnographic research (x 40 participants)

To focus on understanding how people behave and what they use, in order to identify opportunities for improvement.

Page 55

Research synthesis

Ensuring that stakeholder questions are answered, that insights are documented in a robust and reusable way and that actionable recommendations for the product or service are arrived at.

Page 66

What will I get?

SUGGESTED OUTPUTS

Insights report

Page 85

Current state journey map

Page 78

Personas

Page 88



Develop strategic recommendations or a policy

These plans are designed for when you want to work internally in your organisation or department.



Identify opportunities and develop untested design ideas

Develop ideas and concepts with stakeholders

Option 1
Time frame 2–4 weeks
Budget \$20,000–\$25,000

Pros

- Develops alignment around opportunities

Cons

- Design concepts will be largely based on assumptions

How do I do this?

SUGGESTED METHODS

- **Ideation workshop**

Bringing together stakeholders to document ideas in response to a well-defined problem.

Page 59

What will I get?

SUGGESTED OUTPUTS

Opportunities and recommendations

Page 87

Value proposition

Page 98

Co-design solutions with users

Engage users directly in the design of solutions that will affect them

Option 2

Time frame
8–10 weeks

Budget
\$60,000–\$80,000

Pros

- Collaboratively builds an understanding of both problem and solution
- Brings diverse groups together

Cons

- May be difficult to reach consensus on problems and solutions

How do I do this?

SUGGESTED METHODS

Expert interviews and stakeholder workshops

To design the engagement with community members and ensure problems are identified and well articulated prior to co-design.

Page 56

Co-design workshop(s)

A facilitated workshop in which citizens, users or stakeholders are brought together to collaboratively define problems and potential solutions.

Multiple workshops may be run to accommodate access and inclusion needs or to focus workshops on particular groups or problems.

Page 50

What will I get?

SUGGESTED OUTPUTS

Opportunities and recommendations

Page 87

Prototypes

Page 91

Identify opportunities, design and test a potential solution

Create concepts that demonstrate how a solution might work

Option 3
Time frame 8–10 weeks
Budget \$80,000–\$100,000

Pros

- Creates alignment around opportunities
- Prioritises ideas and develops a framework for developing and assessing new ones

Cons

- Develops basic design concepts with little opportunity for refinement

How do I do this?

SUGGESTED METHODS

Ideation workshop or design sprint (x1)

Using existing research to workshop, explore and document potential solutions to common pain points.

Page 59, 53

Research synthesis

Synthesis of workshop outcomes, analysing concepts for similarities and differences so that ideas can be consolidated.

Page 66

Low-fidelity prototyping (x1) or future-state journey mapping

To demonstrate how a single solution might work.

Page 62, 83

What will I get?

SUGGESTED OUTPUTS

Opportunities and recommendations

Page 87

Value proposition

Page 98

Future-state journey map or storyboards and scenarios or CX vision and principles

Page 83, 96, 95

Low-fidelity prototype(s)

Page 62

Identify opportunities, design and test multiple potential solutions

Create multiple concepts that demonstrate how a solution might work, validate and prioritise them

Option 4

Time frame
12 weeks

Budget
\$100,000–\$150,000

Pros

- Creates alignment around opportunities
- Prioritises ideas and develops a framework for assessing new ones
- Explores multiple concepts

Cons

- Time-consuming

How do I do this?

SUGGESTED METHODS

Ideation workshop

Using existing research to workshop, explore and document potential solutions to common pain points.

Page 59

Research synthesis

On workshop outcomes, analysing concepts for similarities and differences so that ideas can be consolidated.

Page 66

Prioritising ideas low-fidelity prototyping (x2) or design sprint (x2)

To demonstrate how a single solution might work.

Page 62, 53

What will I get?

SUGGESTED OUTPUTS

Opportunities and recommendations

Page 87

Value proposition

Page 98

Future-state journey map or storyboards and scenarios

Page 83, 97, 96

UX vision and principles

Page 95

Prototypes

Page 91

Develop strategic recommendations for an existing product or service

Combine ethnographic research and synthesis to develop actionable recommendations for future design work or service iteration

Option 5
Time frame 12 weeks
Budget \$100,000 – \$150,000

Pros

- Creates alignment around opportunities
- Prioritises ideas and develops a framework for assessing new ones
- Explores multiple concepts

Cons

- Time-consuming

How do I do this?

SUGGESTED METHODS

Ethnographic research (x 28 participants)

To focus on understanding how people behave and what they use, so that opportunities for improvement are identified.

Page 55

Research synthesis

Ensuring that stakeholder questions are answered, that insights are documented in a robust and reusable way, and that actionable recommendations for the product or service are arrived at.

Page 66

What will I get?

SUGGESTED OUTPUTS

Opportunities and recommendations

Page 87

Value proposition

Page 98

Future-state journey map or storyboards and scenarios

Page 83, 97, 96

UX vision and principles

Page 95

Prototypes

Page 91

Prototype, test and iterate the design of a product, service or policy

These plans are designed for when you want to begin developing a solution.



Document the basics of a design so that an implementation team knows where to start

Create a coherent vision for a product or service

Option 1
Time frame 6 weeks
Budget \$40,000–\$80,000

Pros

- Details the high-level vision for a product or service

Cons

- Designs may not be in-depth enough for implementation teams

Tips

- Design should be informed by thorough Discovery and Define phases

How do I do this?

SUGGESTED METHODS

• Low fidelity prototyping; or

To demonstrate how a single solution might work.

Page 62

• Future-state journey map

To describe a vision for the user experience you want to create.

Page 83

What will I get?

SUGGESTED OUTPUTS

Prototypes

Page 91

Future-state journey map

Page 83

Create complete low-fidelity prototypes that have been validated with users

Create and test basic product or service concepts

Option 2

Time frame
8–14 weeks

Budget
\$100,000–\$150,000

Pros

- Gives implementation teams a reliable blueprint from which to scope and execute work

Cons

- Only one round of user testing (and design iteration)
- May not provide the high-fidelity needed to answer all implementation questions phases

How do I do this?

SUGGESTED METHODS

Low fidelity prototyping; or

To demonstrate how a single solution might work.

Page 62

User testing; or

To understand what works well and what needs improvement.

Page 73

Future-state journey map; and

To describe a vision for the user experience you want to create.

Page 83

Service prototyping

A mock-up of a site, product or service that you can use to test your ideas before beginning to build.

Page 91

What will I get?

SUGGESTED OUTPUTS

Complete low-fidelity prototypes

Page 62

User testing results

Page 73

Detailed future-state journey map

Page 83

Implementation road map

Page 84

Create high-fidelity designs of a product or service, ready for implementation

Develop high-fidelity and detailed design concepts, validate them and plan implementation

Option 3
Time frame 10–20 weeks
Budget \$150,000–\$250,000

Pros

- Detailed designs that have been validated through user testing

Cons

- May not allow for further iteration or learning through the implementation phase

Tips

- Ensure that consultation with implementation teams is included in the scope of work to ensure designs are technically feasible and financially viable

How do I do this?

SUGGESTED METHODS

• High-fidelity prototyping; and

A method to test and finalise the details of a design.

Page 58

• User testing; or

To understand what works well and what needs improvement.

Page 73

• Future-state journey map

To describe a vision for the user experience you want to create.

Page 83

What will I get?

SUGGESTED OUTPUTS

Complete high-fidelity prototypes

Page 58

Implementation road map

Page 84

Methods

A collection of human-centred
design tools and references

Low-fidelity prototyping

A method used to communicate, test and iterate an idea

What is prototyping?

Prototyping is a process that transforms an idea into something tangible that can be shared, tested and critiqued. Prototypes are either refined or discarded based on their performance and suitability. To avoid unnecessary work, designers begin by making low-fidelity (basic) prototypes. These include enough detail to communicate and test the core of an idea, but no more. Low-fidelity prototypes are used to inform strategic decisions around a solution.

When the core concepts of an idea are tested, designers move on to produce high-fidelity prototypes. These prototypes allow usability, user experience, visual design and content to be tested. High fidelity prototypes are used to test a solution right before build and implementation.

Strengths

- Helps confirm that a solution is desirable or viable
- Helps align sponsors and stakeholders around a direction
- Helps engage implementation teams around feasibility

Weaknesses

- Doesn't contain detailed information, interactions or designs
- Only confirms that a solution **might** work, not that it will

PURPOSE

- To make tangible the core concept of a proposed solution
- To test and refine some of the high-level elements or components of the idea
- To understand whether a proposed solution solves the problems identified

WHAT YOU GET

- A tool to use to test the core concepts of an idea
- A tool with which to conduct user testing
- A starting point for 'high-fidelity' prototyping

Tips!

Designers should introduce test participants and stakeholders to a low-fidelity prototype by explaining that the prototype is incomplete and only intended to test core concepts.

Teams should make low-fidelity prototypes look unfinished (by using black and white instead of colour, for example). However, they should use realistic and accurate content.

Toolkits

The Skeptic's Guide To Low-Fidelity Prototyping

www.smashingmagazine.com/2014/10/the-skeptics-guide-to-low-fidelity-prototyping/

Stop Talking and Start Sketching: A Guide to Paper Prototyping

www.blog.marvelapp.com/stop-talking-start-sketching-guide-paper-prototyping/

High-fidelity prototyping

A method to test and finalise the details of a design

PURPOSE

- To ensure key stakeholders agree on the goals of a project
- To ensure the project team is aware of the underlying vision and motivation for doing the work
- To document key milestones and desired outcomes
- To agree on roles and responsibilities on the project

WHAT YOU GET

- An agreed-upon set of assumptions and expectations for the project
- Documented timelines, milestones and ways of working
- A briefing document for the project team to refer to

Strengths

- Helps build momentum around an idea before launch
- Gains confidence that the details of a design are usable

Weaknesses

- May not consider implementation constraints

Tips!

High-fidelity prototypes should always be tested with users so that flaws in a design are fixed before implementation.

Toolkits

Testing & Prototyping Design Activity

www.servicedesigntools.org/taxonomy/term/3

High-fidelity prototyping: What, When, Why and How?

www.blog.prototypr.io/high-fidelity-prototyping-what-when-why-and-how-f5bbde6a7fd4

Project kick-off workshop

A workshop designed to align stakeholders around the goals, outputs, timelines and constraints of a project

PURPOSE

- To ensure key stakeholders agree on the goals of a project
- To ensure the project team is aware of the underlying vision and motivation for doing the work
- To document key milestones and desired outcomes
- To agree on roles and responsibilities on the project

WHAT YOU GET

- An agreed-upon set of assumptions and expectations for the project
- Documented timelines, milestones and ways of working
- A briefing document for the project team to refer to

Tips!

Before the workshop, a facilitator should be nominated to ensure that key decisions are addressed. This person should also ensure that all participants are able to contribute to the discussion equally. Workshop organisers should also ensure that key decision makers are present.

Strengths

- Real-time discussion and resolution of questions, risks and objectives
- Fast decision-making (if the right people are in the room)

Weaknesses

- Large groups may mean some people aren't heard
- Some participants may not be willing to speak up or ask questions if senior people are in attendance

Toolkits

The Project Canvas

www.clearleft.com/posts/canvassing-a-project

Ways of Working Canvas

www.medium.com/@CharlesRowat/the-ways-of-working-canvas-651f8f44f288

Kick-off your first meeting like a pro

www.medium.com/nyc-design/kick-off-your-first-ux-meeting-like-a-pro-dcf3c2d12db1

Stakeholder interviews

Establish a project's background, constraints and goals and build rapport with decision-makers

PURPOSE

- To ensure key stakeholders agree on the goals of a project
- To ensure the project team is aware of the underlying vision and motivation for doing the work
- To document key milestones and desired outcomes
- To agree on roles and responsibilities on the project

WHAT YOU GET

- An understanding of why the project has been initiated
- Documented constraints and goals, according to key stakeholders
- Early understanding of anticipated project challenges or barriers

Strengths

- Hearing about project priorities and motivations in the stakeholder's own words
- Key decision makers are engaged early in the project
- Helps with identifying and addressing any misalignment in project expectations early on

Weaknesses

- Misalignments can be identified but are difficult to resolve in interviews
- Project delays may occur if stakeholder groups are large
- It can be difficult to access or get the time of senior stakeholders

Toolkits

Stakeholder Interviews

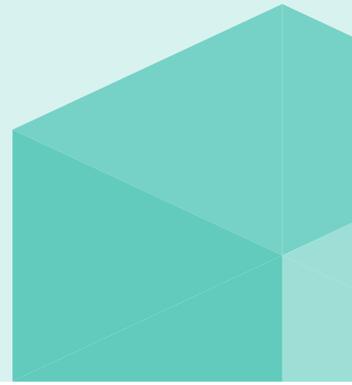
www.medium.com/@mentorcg/stakeholder-interviews-3d4596ac6ed6

5 quick tips for more effective stakeholder interviews

www.medium.com/caboodle/5-quick-tips-for-more-effective-stakeholder-interviews-f30c146d4b64

Card sorting

A method for exploring relationships between content and deciding structures



Key terminology

'Open' card sort

Participants group content into categories that they create and name

'Closed' card sort

Participants group content into predefined categories that have already been named

PURPOSE

- To sort 'cards' (content) into 'categories' that describe logical groupings of those cards
- To understand how different pieces of content might be categorised together
- To organise information into categories that make the most sense to people
- To understand why people see connections between information

Strengths

- Works well for small sets of content
- Works best when participants are familiar with the domain or topic

Weaknesses

- Relies on content being identified ahead of time
- Can be overwhelming for participants if there are more than 20 or 30 'cards' to sort

WHAT YOU GET

- An information architecture for a website or document
- An understanding of the reasons people categorise content the way they do

Tips!

Ask test participants to talk out loud as they sort cards into categories. This will give the researcher better insight into why content is being grouped as it is. Results of the cardsort should not be taken as the final information architecture – they should guide (rather than dictate) the information architecture.

Toolkits

Online Card Sorting Software

www.optimalworkshop.com/optimalsort

Card Sorting Beginner's Guide: Improving Your Information Architecture

www.smashingmagazine.com/2014/10/improving-information-architecture-card-sorting-beginners-guide

Desktop research

Review of existing research for information relevant to a project's needs

PURPOSE

- To identify specific or useful qualitative or quantitative data relevant to project needs
- To develop an understanding of current policy and business needs
- To identify gaps in existing data requiring further research
- To understand how a project may contribute back to a larger body of knowledge

WHAT YOU GET

- Collated list of available source data relevant to project needs
- Summary of insights drawn from source data

Tips!

When reviewing data it's important to assess how the data were gathered. Knowing how to assess the conclusions reached in published research is an important skill. All conclusions should be critically examined before being used in reports.

Strengths

- Provides clarity on what work has already been done to avoid duplication of effort
- Provides an awareness of methodologies or approaches that have been tried before

Weaknesses

- Quality of insights depends on the relevance, timeliness and transparency of source data
- Relevant source data may be missed if time for searching and consulting is not adequate

Toolkits

Desk Research: Secondary Research

www.thisisservicedesigndoing.com/methods/secondary-research

Desk Research: Preparatory Research

www.thisisservicedesigndoing.com/methods/preparatory-research

Ethnographic research

Combines observation with interviews to understand what people do, not what they say

PURPOSE

- To uncover deeper insights into behaviour than can be obtained by interviewing or surveys alone
- To understand the use of a product or service, or a change in behaviour, over time
- To understand a person or community from the bottom up, without assumptions

WHAT YOU GET

- 'Thick' data, made up of rich descriptions of daily life, behaviour, interactions and experiences
- Insight into what does and doesn't work for people without participants being conscious of that themselves
- Stories about daily life and interactions between people, products and services
- An understanding of people's behaviours, hopes and aspirations

Strengths

- Gives rich insight into the daily lives, behaviours and interactions of an individual or community
- Gives insights into behaviour, usage and interaction over time
- Generates more reusable insights compared with straight interviews or surveys
- Uncovers new knowledge about the context and problem that can lead to different ideas and solutions

Weaknesses

- Can be time-consuming to analyse data gathered from fieldwork
- The quality of the insights is dependent on the experience of the researcher
- Can lead to higher recruitment and incentive costs (as more time is needed with each participant)

Tips!

When assessing plans for ethnographic research, experience is vital. Look for formal qualifications in the social sciences and at least 5 years research experience.

Toolkits

Mobile Ethnography

www.indeemo.com

When and How to use Ethnographic Research

www.spotless.co.uk/insights/ethnography-when-and-how/

A practitioner's guide to running successful ethnographic research with clients present

www.spotless.co.uk/insights/a-practitioners-guide-to-running-successful-ethnographic-research-with-clients-present/

Expert interviews

Interviews with subject matter experts to learn about a domain

PURPOSE

- To learn about an unfamiliar topic or subject area
- To collect ideas from people familiar with challenges in a particular area

WHAT YOU GET

- Technical knowledge and insights into a problem or topic area
- Feedback on specific aspects of your project or plan
- Recommendations on who else to engage about your project

Strengths

- Provides fast understanding of a specialist domain
- Can help reveal the 'unknown unknowns' around a project or plan
- Provides an overview of the issues or opportunities that may be discovered through other research

Weaknesses

- Should not be considered a replacement for community engagement or other discovery research
- What experts think are issues or opportunities are not always what citizens want, need or expect
- Experts can find it difficult to imagine solutions that are outside of their area of expertise

Tips!

Ensure you include government and non-government experts in your research. Speaking to them before further research can help inform a research approach. Speaking to them after other research can help validate your understanding.

Experts can be useful for recruitment, too. They can recommend other people you should talk with, including end users, service providers or other experts.

Toolkits

One-on-One Interview

www.vicgov-my.sharepoint.com/:w:/r/personal/sophie_turner_dpc_vic_gov_au/_layouts/15/Doc

Design Kit Expert Interviews

www.designkit.org/methods/43

The Do's & Don'ts Of Subject Matter Expert Interviews

www.nectafy.com/blog/subject-matter-expert-interviews

Quantitative research

Research with large or many datasets that describe 'what' happens rather than 'why' it happens

PURPOSE

- To help understand what (not why) is already happening in a community or around an existing policy, product or service
- To analyse large or numerous data sets with quantitative data
- To uncover insights about behaviour and interaction through analysis of quantitative datasets

WHAT YOU GET

- Data that describes what is happening around an existing policy, product or service
- Insights that help scope or size qualitative insights

Strengths

- Can provide insight into use and behaviour across large groups, products or services

Weaknesses

- Difficult to determine reasons (the why) for what the data describe
- Correlations may be found for unrelated phenomena

Tips!

Quantitative research should always be informed by qualitative research. Starting with qualitative research helps understand what's important to a community or group. It helps understand which correlations matter.

Quantitative research requires the ability to analyse data.

Consider whether and how to involve the business insights team as needed.

Toolkits

Business Insights

businessinsights@dpc.vic.gov.au

Quantitative User-Research Methodologies: An Overview

www.nngroup.com/articles/quantitative-user-research-methods/

The role of design in quantitative research

www.medium.com/elisa-design/the-role-of-design-in-quantitative-research-2a21e34588de

Literature review

A summary of existing knowledge and emerging trends, highlighting gaps for further research and design enquiry

PURPOSE

- To understand the knowledge that already exists on a topic
- To understand the emerging trends and known opportunities on a topic
- To determine gaps in knowledge which may require deeper research and design enquiry

WHAT YOU GET

- A summary of existing knowledge and gaps with a reference list
- Understanding of precedence and lessons learned

Tips!

If possible, ask a subject matter expert to recommend information sources.

Strengths

- Provides an overview of existing understanding
- Identifies gaps in knowledge which can help plan further research

Weaknesses

- Generally summative rather than analytical when conducted for HCD projects
- Quality is constrained by time and access to research databases and other sources

Toolkits

Open Source Literature Review Tools

www.opensource.com/article/18/6/open-source-literature-review-tools

Literature Reviews

www.writingcentre.unc.edu/tips-and-tools/literature-reviews/

Landscape review

A summary-style review of comparable products and services in the market that identifies vulnerabilities and opportunities for differentiation

PURPOSE

- To determine what comparable products and services exist in the market
- To identify vulnerabilities and opportunities for differentiation
- To identify and prioritise features and functionalities of comparable products and services. These are valuable for reference in research and design activities

WHAT YOU GET

- A summary-style review with supporting images (e.g. screenshots)
- Details of comparable products and services highlighting vulnerabilities and opportunities for differentiation

Strengths

- Projects start from a more informed position. A baseline understanding of the broader landscape will make early ideation more efficient
- Helps show what's most used and most desirable in the market
- Useful ongoing reference for feature and function prioritisation and product decisions

Weaknesses

- It may be difficult to review products and services in authenticated or restricted IT environments. These include intranets or enterprise systems
- The review is only as good as the breadth and depth of coverage of other products and services in the market. The results depend on knowing what those products are and where to find them

Tips!

- Think beyond the immediate competitor market. Consider what other platforms or solutions customers are using. Include these in the review. This might include looking internationally.
- Some reviews will require access to an authenticated or restricted IT environment. Do you have co-workers, friends or family that might have access to those environments? Consider asking them to take screenshots for you. Bear in mind the security implications of asking for access to restricted environments. Use your discretion.

Toolkits

A UXers guide to competitor reviews

www.uxforthemasses.com/competitor-reviews/

Differentiating Your Design: A Visual Approach to Competitive Reviews

www.uxmatters.com/mt/archives/2009/04/differentiating-your-design-a-visual-approach-to-competitive-reviews.php

Survey

A tool that gathers comparative data from medium to large numbers of participants

PURPOSE

- To understand the behaviours, needs or expectations of a large cross-section of people
- To generate comparative qualitative and quantitative data sets
- To gather initial data to inform the design or focus of other research activities

WHAT YOU GET

- Qualitative or quantitative data that can be compared across demographics or communities

Strengths

- Describes the what of a situation or phenomena
- A fast way of gaining an 'birds-eye view' of a situation or topic
- Builds comparable data sets over time, allowing researchers to track changes

Weaknesses

- Needs careful attention to its design in order not to bias answers
- Unlike an interview setting, researchers are unable to probe participants' responses
- May not provide insight into why a phenomena occurs
- Generalises insights, sometimes missing important details around experience and opinion
- Databases and other sources and time

Tips!

Surveys are most powerful when they combine qualitative and quantitative data. If qualitative responses are not allowed in the survey, researchers should conduct interviews.

Toolkits

Online Survey Software and Questionnaire Tools

www.mopinion.com/top-21-online-survey-software-questionnaire-tools-overview/

Medium Surveys

www.medium.com/user-research/user-research-resources-10-surveys-587ee73ca1f2

28 Tips for Creating Great Qualitative Surveys

www.nngroup.com/articles/qualitative-surveys/

Engage Victoria

www.engage.vic.gov.au/about

Research synthesis

Turning data into insights, theories, recommendations and designs

PURPOSE

- To make sense of research data (e.g, interview transcripts or survey results)
- To answer a project's research questions
- To look for patterns and correlations in data so that new knowledge is created

WHAT YOU GET

- Insights in the form of one or more of:
 - Insights reports
 - Journey maps
 - Personas
 - Strategic recommendations
 - Product or service concepts
 - Product or service evaluations
- The exact output depends on the needs of the project and its stakeholders.

Strengths

- Thinking of synthesis as a distinct activity means project teams are likely to plan time for it
- Research synthesis is an activity to be shared
- Collaborating on insights is a great way of engaging team members and stakeholders

Weaknesses

- It is difficult to learn without formal research training
- Synthesis with qualitative data is challenging for those who work with quantitative datasets
- Depends on the quality of data collected, and the way in which it was collected
- Correlations may be found for unrelated phenomena

Tips!

Most research or design projects do not leave enough time for synthesis. As a rule of thumb, every hour of research activity should allow an hour of synthesis time.

Toolkits

Developing Key Insights

www.thisisservicedesigndoing.com/methods/developing-key-insights

Synthesis: How to make sense of your design research

www.uxdesign.cc/synthesis-how-to-make-sense-of-your-design-research-d67ad79b684b

Using Trello for User Research Synthesis

www.builttoadapt.io/using-trello-for-user-research-synthesis-fb1abdfc7c4b

Ideation workshop

Helps groups of people work with research insights and elicit a broad range of potential solutions

PURPOSE

- To bring stakeholders together to explore potential solutions
- To 'go wide' on the potential solutions
- To understand what constraints exist around solution

WHAT YOU GET

- A set of solution ideas for further synthesis and validation

Strengths

- Effective for getting a diverse group across the implications of research findings
- Easy way of documenting a set of ideas from a diverse group
- Effective way of eliciting solution constraints (based on collective feedback of ideas)

Weaknesses

- Participants need to understand the project context and prior project activities. The workshop risks being ineffective if they do not
- Success depends on participant mindsets. The need to be able to put aside 'realities' of implementation for blue-sky thinking

Tips!

Ideation workshops rarely uncover workable or viable solutions in and of themselves. At their best, they are ways of documenting many ideas. You can combine, refine and test these later.

Toolkits

The 2 Hour Ideation Workshop

www.medium.com/@ascent0/the-2-hour-ideation-workshop-ed471c538adc

How To Run An Effective Ideation Workshop: A Step-By-Step Guide

www.uxplanet.org/how-to-run-an-effective-ideation-workshop-a-step-by-step-guide-d520e41b1b96

How To Run a Successful Ideation Workshop

www.collectivecampus.io/blog/how-to-run-an-ideation-session

Design sprint

A multi-day process to design, prototype and test ideas with customers

PURPOSE

- To work together as a design team over a time-constrained period
- To rapidly generate, test and iterate design product and feature concepts
- To address business questions
- To test potential future solutions with real customers
- To determine desirability, before committing time and expense to building products
- To identify new market opportunities through testing ideas in a safe environment

WHAT YOU GET

- Disposable prototypes to test hypotheses
- Rapid definition of new product features and adoption strategies
- Solution validation with real customers

Strengths

- Solves design problems quickly
- Tests assumptions with reactions and feedback from real customers
- Provides a shortcut from ideas to learnings
- Minimises risk before committing time and expense to building products

Weaknesses

- Relies on 5 days of time and resource commitment by design team, plus preparation
- Extensive preparation is necessary for the sprint to be beneficial. The design problem needs to be clear beforehand. The sprint needs to be carefully planned. Materials need to be prepared in advance

Tips!

- The success of a design sprint depends as much on preparation as execution
- Set expectations with the business and participants about what sprints are for. For example, sprints are focused on ideas and concepts. Sprints do not produce finished product outcomes. They don't require creative or skill specialty. They are not about 'design by committee'.
- Ensure the sprint team includes a person with the authority to make decisions (eg a manager or team leader). The decision-maker is crucial so the team can move on.
- A design expert should also be present.

Toolkits

Tool for Developing Design Sprints

www.telepathy.com/blog/design/the-ultimate-and-free-tool-for-facilitating-design-sprints

Introduction to Design Sprints

www.designsprintkit.withgoogle.com/introduction/overview

Incorporating Design Thinking into a Design Sprint Focused Organisation

www.medium.com/handsome-perspectives/incorporating-design-thinking-into-a-design-sprint-focused-organisation-e91bff88700f

User testing

Test prototypes with citizens to understand what works well and what needs improvement

PURPOSE

- To determine usability issues of a product or service
- To gain insights into what should be improved
- To validate that a solution solves the right problem

WHAT YOU GET

- Summary report of test feedback grouped by theme and ranked by issue severity
- Recommendations for changes to overcome identified issues
- Rich user feedback and quotes, usually in audio or video clips

Strengths

- A rigorous way of identifying what is working well and what needs improvement
- Can run with short notice
- Can be built into an agile or iterative design process

Weaknesses

- Due to the simulated nature of testing, it is possible that real-world issues may be missed
- Testing usually happens out of context for users – it may feel unnatural to them
- Unless using a live service or product, technical parts of the experience are difficult to simulate (such as speed)

Tips!

Recruitment is time-consuming. Specialist recruitment agencies should be used wherever possible. This allows the design team to stay focused on the research and design tasks.

Tests should be held in a room with a one-way mirror so that observers can view testing from the next room. Alternatively the session can be shared by video conference link or recorded for later viewing.

Stakeholders should be encouraged to observe sessions. Observers should attend more than one session so that they understand many perspectives.

Design changes should not be made until all testing sessions have been completed. This allows the team to identify the root cause of issues over multiple sessions.

Toolkits

Selecting an online tool for unmoderated remote user testing

www.nngroup.com/articles/unmoderated-user-testing-tools/

User Testing

www.nngroup.com/topic/user-testing/

5 tips to get you started

www.medium.com/@DoKriek/user-testing-101-5011f9aef06b

Diary study

Collect information by asking participants to record entries about a particular activity or experience over time in a log, diary or journal

PURPOSE

- To collect qualitative information about participants
- To understand how participant behaviours, motivations, habits or attitudes change over time
- To investigate customer experiences as they unfold over time and across multiple touchpoints

WHAT YOU GET

- A series of diary entries from each participant, which may be text, audio, video or photography
- Matched behavioural data from other sources that have the same timeline, such as a wearable fitness tracker or a social media site

Strengths

- Provides information about behaviours, habits, motivations or attitudes that are expected to change over time as a product or service is repeatedly used
- Can reach participants in remote areas who are too expensive to interview or visit
- For evaluating **how** engagement happens over time rather than **why** – which can be researched better using other methods

Weaknesses

- Diary studies contain only self-reported entries so for some research objectives this may not be the most valid method and observational ethnography might be used instead
- Reaching participants who cannot document their experiences easily for accessibility reasons

Tips!

Diary studies produce a lot of data. You'll need to leave enough time for coding and analysis.

Toolkits

6 things to consider when setting up a UX diary study

www.spotless.co.uk/insights/6-things-for-ux-diary-study/

Diary Studies: Understanding Long-Term User Behaviour and Experiences

www.nngroup.com/articles/diary-studies/

Diary Studies. User research resources for beginners and pros

www.medium.com/user-research/user-research-weekly-9-diary-studies-e53d9312b485

Helpful Links for Diary Studies

www.medium.com/priority-post/helpful-links-for-diary-studies-1ed3b1f92e7f

Contextual inquiry

A semi-structured interview method where participants are observed and interviewed in context – where they live or work or in the situation where they would use a product or service

PURPOSE

- To gather information about behaviour, which is often difficult for participants to truthfully describe in lab-based interviews
- To put participants at ease; being in the right environment can also prime them mentally for the interview
- To collect information about the environment and context of use

WHAT YOU GET

- Rich qualitative data about real behaviours and use
- Photographs and rich documentation of the environment or behaviours you are studying
- Insight to things people don't talk about when using a product or service

Strengths

- Great for investigating the processes and sequences that make up our behaviours. Participants can 'talk out loud' as they do something
- Great for discovery – participants are able to bring unexpected things to the researcher's attention
- Good for creating safe spaces – this is important to help participants relax or to share private moments, objects or environments

Weaknesses

- Requires a lot of skill; not a method for inexperienced researchers
- Researchers need to be equipped for potentially difficult environments or subject matter
- Travelling to people's homes or workplaces could put the researchers at risk
- Not always ethically appropriate
- Time-consuming and often requires co-locating and so it may feel unnatural to participants
- Unless using a live service or product, technical parts of the experience are difficult to simulate (such as speed)

Tips!

- You don't always have to conduct an interview in context to collect great data. Ask yourself what the benefits are of conducting interviews in context. If there are none, reconsider using this method.
- If you are trying to learn how someone **does** or **uses** something, then contextual inquiry is the best option.
- Ethics need to be very carefully considered.

Toolkits

Selecting an online tool for unmoderated remote user testing

www.nngroup.com/articles/unmoderated-user-testing-tools/

User Testing

www.nngroup.com/topic/user-testing/

5 tips to get you started

www.medium.com/@DoKriek/user-testing-101-5011f9aef06b

Service safari

Team members go out and directly experience the service in the role of customer and notice what it's like to step into their shoes

PURPOSE

- For project team members and stakeholders to increase empathy for service customers
- To experience firsthand what it feels like to use and interact with a service as a customer
- To observe other real customers while they interact with a service
- If possible, to experience another organisation's service that may be comparable

WHAT YOU GET

- Data that describes what team members observed and how they felt when using a service
- Some potential areas for improvement (observed gaps or shortfalls in service delivery)
- Some potential opportunity areas based on team observations and reflection after the safari

Strengths

- Excellent way to increase empathy for customers
- Good for collecting observations about potential areas for improvement and opportunity areas
- A good way to make pre-existing customer feedback more relatable to team members

Weaknesses

- It may feel challenging for a team member to enter the mindset of a new customer when they have knowledge of a service's inner-workings
- There's a risk of confirmation bias whereby team members only notice the things that confirm their established opinions or beliefs

Tips!

Service safaris are observational and experiential. The safari is an opportunity to collect information from all senses including smells, sounds and sensations. Team members should note their emotions at different moments during the service experience.

Toolkits

Service Safari Worksheet

www.nfls.lib.wi.us/uploads/5/5/1/3/55139073/service-safari-worksheet.pdf

What is a service safari and how to use it

www.medium.com/sutherland-labs/what-is-a-service-safari-and-how-to-use-it-c307be4fb065

What is field research: Definition, methods, examples and advantages

www.questionpro.com/blog/field-research/

Sample design

A way of deciding who your participants will be and how many people you will need to include

PURPOSE

- To build a recruitment specification that will help you achieve your research goals

Strengths

- Sample design is a necessary part of the research process that allows a team to control for the types of participants in their study
- It helps teams hone their research objectives by being clear about who should be included in the research

Weaknesses

- Researchers may be unconsciously biased in who they exclude from research. Gender, age, language ability, income and education levels should all be discussed as part of a sample design
- It may not be possible to know what or who is important to your research until you get started
- Complex sample designs can lead to teams being stuck in analysis paralysis, lacking confidence in what their data is saying or who it is saying it about

WHAT YOU GET

- A recruitment specification to use to source research participants
- Determines the most appropriate segment of the community
- Metrics and indicators that are aligned to the impact measures for the project

Tips!

Validity for qualitative research is different to quantitative research. Qualitative studies rarely need more than 40 participants; as few as eight participants may yield valid results.

In design research we usually recruit for experience. For example, we may be interested in people who have registered a vehicle in the past 18 months. We are less interested in ensuring all demographics are represented in that group. If a team thinks that language, age or locale might influence that experience, they should aim for a diverse sample for those attributes.

Toolkits

**Recruitment Brief Template 'Our Users Are Everyone':
Designing Mass-Market Products for Large User Audiences**
www.nngroup.com/articles/everyone-as-users/

Finding participants for user research
www.gov.uk/service-manual/user-research/find-user-research-participants

Teaching Tolerance: Test Yourself for Hidden Bias
www.tolerance.org/professional-development/test-yourself-for-hidden-bias

Heuristic evaluation

Assess the effectiveness of a product against established design and content standards

PURPOSE

- To learn how a product performs against digital design standards
- To identify problems with the user-interface or content
- To establish a benchmark for measuring incremental improvements

WHAT YOU GET

- Feedback on how a digital product measures up against design standards
- A set of issues that can be investigated and resolved by the product team in a systematic way

Strengths

- A way to get fast feedback from an expert in user experience
- Several evaluations can be done for different iterations of the design
- Complements other research, such as user testing

Weaknesses

- Heuristic evaluation should be done instead of user testing with current or prospective users
- Findings from the evaluation are only related to the product's current design
- Not useful for informing the product design at a strategic level

Tips!

An experienced user-experience (UX) practitioner should do the evaluation. This person must know how to assess the product against well-established principles and standards. These include:

- the Victorian Government Digital Standards www.vic.gov.au/digital-standards
- Web Content Accessibility Guidelines (WCAG) www.w3.org/WAI/standards-guidelines/wcag/
- Search Engine Optimisation (SEO) standards

Toolkits

Heuristic Evaluation: How to Conduct a Heuristic Evaluation

www.interaction-design.org/literature/article/heuristic-evaluation-how-to-conduct-a-heuristic-evaluation

10 tips on how to conduct a perfect Heuristic evaluation

www.medium.muz.li/10-tips-on-how-to-conduct-a-perfect-heuristic-evaluation-ae5f8f4b3257

Affinity mapping

A way to analyse and synthesise all the information generated from research

PURPOSE

- To find patterns across the different types of data that is collected during research
- To format research data in a way that makes it sortable and organisable
- To generate research findings and insights from raw data

WHAT YOU GET

- A collection of data points or observations that can be analysed in its entirety
- Research findings generated by organising similar or related data into clusters – each cluster reveals something new about the research topic

Strengths

- Research observations are consistently documented so they are sortable and organisable (eg a single idea per post-it note or per spreadsheet cell)
- A great way to visualise all research data in one place, either on a physical wall or in a digital space
- Opens the data to more than one team member so that research findings are collaboratively generated, allowing different interpretations of the data to be discussed

Weaknesses

- Usually done with post-it notes, requiring wall space and can get messy
- When many people transcribe data to a format like a single post-it note, it's hard to achieve a consistent level and amount of detail
- It can be time-consuming to transcribe all relevant data from all research activities. Remember to include secondary research, card sort results, interview observations, verbatim, statistics, etc . . .

Tips!

Affinity mapping can be done alone, but it's better when many people map together. Each person will see new patterns in the data. It's helpful to talk aloud with colleagues as data is organised into clusters.

Toolkits

Affinity Diagram

www.uxplanet.org/free-sketching-template-for-building-a-meaningful-affinity-diagram-during-the-ux-process-f832e081782d

Affinity Diagramming for Collaboratively Sorting UX Findings and Design Ideas

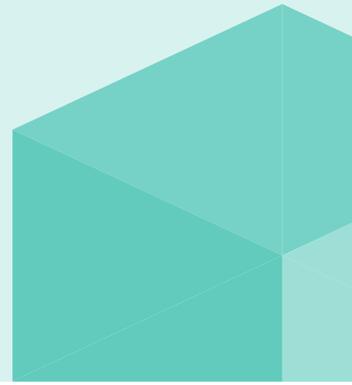
www.nngroup.com/articles/affinity-diagram/

Design Thinking Methods: Affinity Diagrams

www.uxdict.io/design-thinking-methods-affinity-diagrams-357bd8671ad4

Stakeholder relationship mapping

Visualise the relationships between people, teams or agencies who could affect, or be affected by, the outcomes of a project



PURPOSE

- To identify and name stakeholders who are part of a project ecosystem – stakeholders are individuals, teams, agencies and partner organisations
- To show where there may be areas of alignment or areas of opposition between stakeholders
- To make the connections and associations between stakeholders tangible by visualising them

WHAT YOU GET

- A visual map of all stakeholders who can affect the project delivery and its outcomes
- Information about stakeholders that will shape a research plan. Stakeholders' knowledge, networks, challenges and unmet needs can be explored via research methods
- An expanded understanding of the topics, issues and opportunity space

Strengths

- Builds consensus about who the key stakeholders are and the nature of their relationships
- A good way to consider and anticipate stakeholders' concerns, needs and expectations
- Complements project management tasks such as planning stakeholder involvement and communications

Weaknesses

- Mapping is not a solo activity; it should involve many people who know the environment, the people and subject matter very well
- Without all stakeholders being in the room, a map will never be complete or comprehensive
- People will make assumptions about the stakeholders' needs and concerns

Tips!

Bringing stakeholders along on the journey is a core benefit of the human-centred design approach but it's often hard to identify who the most valuable stakeholders are in government.

Stakeholder relationship mapping is an iterative process that you build on as you enter the discovery process and start speaking to people.

Toolkits

Interaction Design Foundation: Map the Stakeholders

www.interaction-design.org/literature/article/map-the-stakeholders

The stakeholder map: A conversation tool for designing people-led public services

www.servdes.org/wp/wp-content/uploads/2018/07/48.pdf

DIY: People and Connections Map

www.diytoolkit.org/tools/people-connections-map/d

Stakeholder engagement

Consultation with people who will be influenced by or have power over a project

PURPOSE

- To ensure all relevant people are involved and informed during a human-centred design (HCD) project
- To ensure organisational politics and hierarchies are respected
- To ensure the people responsible for delivery of the outcomes are involved in the design process

WHAT YOU GET

- Avoid the risk of poor integration, poor timing or duplication of effort with other projects
- A group of stakeholders who feel that they have contributed and have ownership over project outcomes
- Broad input from an organisation into the insights creation, ideation and evaluation phases of an HCD project

Strengths

- Assisting an HCD team to identify possible research participants
- Assisting an HCD team to shape insights after research
- Building empathy within the organisation via the sharing of research insights
- Implementation of ideas and solutions is more likely when stakeholders have been engaged in the design process

Weaknesses

- Thorough stakeholder engagement can be time-consuming
- Stakeholder engagement is not co-design – it often involves stakeholders being updated on project activities, rather than directly contributing

Tips!

Stakeholder engagement is an important first step in most projects. Expectations and assumptions should be documented before a project begins.

Different stakeholders will need to be engaged differently. Tailor your engagement strategy to suit the level of seniority and level of involvement of each stakeholder.

Toolkits

Cabinet Implementation Unit Toolkit: Engaging Stakeholders

www.pmc.gov.au/sites/default/files/files/pmc/implementation-toolkit-3-engaging-stakeholders.pdf

Victorian Government: Stakeholder Engagement and Public Participation Framework and Toolkit

www.dhhs.vic.gov.au/publications/stakeholder-engagement-and-public-participation-framework-and-toolkit

Getting all the Stakeholders on the Same Page

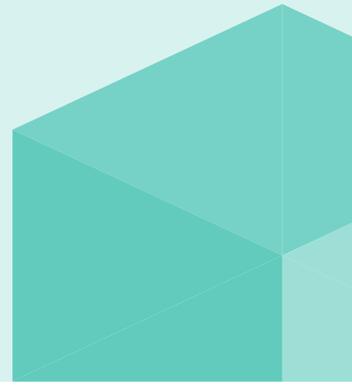
www.medium.com/@emotivebrand/getting-all-the-stakeholders-on-the-same-page-14d9bf4ce1cd

Engage Victoria

www.engage.vic.gov.au/about

Co-design

Co-design brings citizens and stakeholders together to design new products, services and policies



PURPOSE

- To explore both problems and solutions collaboratively
- To connect stakeholders with citizen groups in a meaningful way
- To design solutions that are grounded in both community need and government constraints.
- To open up the project's goals and outcomes to citizen input

WHAT YOU GET

- A clear problem definition co-developed by all participants
- An early conceptual sketch of a solution that draws from the knowledge of experts and end users

Strengths

- Great for building confidence, consensus, ownership, leadership and accountability in a stakeholder group
- Great for producing community-led products, services or policies

Weaknesses

- Co-design relies on the availability of people with different schedules; projects need to build in ample time for collaboration
- Co-design will fail if inclusion strategies are not adopted; getting the right people together under the right conditions is vital to its success
- A participatory mindset can be difficult to foster in groups of experts
- It can be difficult to build consensus in large groups – especially if experts dominate the process

Key terminology

Expert mindset – where decisions are based on the prior knowledge and experience of experts

Participatory mindset – where decisions are based on group consensus

Inclusion – adapting project activities so that communities or citizens can be involved

Tips!

Co-design relies on experienced facilitators and co-design leaders to guide participants through the design process successfully.

Designers should consider and create the conditions that allow safe, respectful and productive collaboration.

Toolkits

The Co-Design Workshop:

The Facilitator's Pocket Guide

www.connection.domain7.com/the-co-design-workshop-the-pocket-facilitators-guide-e36a6c9e08d4

Design Kit Co-Creation Session

www.designkit.org/methods/33

Sharing the principles of co-design

www.medium.com/@emmablomkamp/sharing-the-principles-of-co-design-4a976bb55c48

Problem definition

An in-depth discussion of the project's broader context, various stakeholders' objectives, what purpose each project activity serves and known unknowns or blind spots

PURPOSE

- For the team to build an understanding of the nuances surrounding their project
- For the team to align around the key problems or challenges of the project
- For questions, concerns, hypotheses and assumptions to be discussed

WHAT YOU GET

- A focused, confident and aligned team
- A clearly communicable project challenge that can be used to explain to stakeholders
- A set of hypotheses or assumptions about what is true that can be proven or disproven during research activities

Strengths

- Great for provoking a discussion about the difference between beliefs and assumptions, and evidence and insights
- All team members contribute strategically to the framing of the project
- Great for demonstrating to stakeholders that the project is being carefully and professionally approached

Weaknesses

- Not a good way to start a project if key team members are missing from the discussion
- Can be frustrating if the project approach, methods and activities are locked in and cannot be reflected upon and adjusted

Tips!

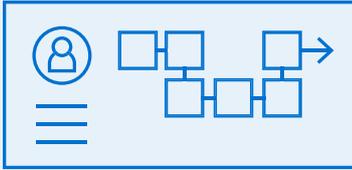
It's helpful to decide before this discussion takes place what is on and off the table – what can and cannot be changed. Some projects have valid non-negotiables – these need to be understood and respected. However, this is the best possible time to pivot a project or reframe key activities based on new information or insights from the newly formed team.





Outputs

Visual artefacts and products



Current state journey map

A tool used to visualise the user experience. It shows where and when a person or group interacts with existing services and products and what the experience is like for them.

Outcomes

- A strategic decision-making tool that can help identify and prioritise programs of work
- An understanding of the challenges faced by individuals or groups when they use a service
- An understanding of how multiple products, agencies or policies are working together – or not

Use when

- You want to know how people experience your service or product over time
- You want to identify and prioritise opportunities for improvement or optimisation
- You want to create alignment within teams and across agencies
- You want to reveal to stakeholders, teams or other organisations the part they play in a complex service or experience
- You want to design new initiatives that can be prioritised according to their impact on the user experience

Journey maps are not

- Process or system maps – Process or system maps focus on what happens within an organisation to deliver products and services. It may be useful to map internal processes too, but it won't help you understand people's experience
- Focused on organisational problems – Journey maps should be focused on understanding, improving or designing a user experience. They may surface or help fix organisational problems, but they should focus on users first

Tips!

Journey maps can be quite large. They work best as hard copy documents that can be displayed on a wall.

Key terminology

Channel	Ways a user interacts with a service provider (eg call centre, app, online or face-to-face)
Delight point	A highlight or moment in the experience that gives users delight or a positive emotion (eg a helpful phone call)
Need	The specific outcome a user is looking to achieve at a touchpoint, step or stage (this is smaller than their overall goal)
Opportunities	Moments in the journey that can be improved – this could be a stage, step, channel or touchpoint
Pain point	An issue, problem or moment in the experience that is likely to cause negative emotions or perceptions for users (eg form is hard to find)
Service blueprint	Shows how the user journey aligns to the organisation's processes
Stage	A phase or a group of steps the user goes through to achieve their goal (eg search or register)
Step	A specific action or activity a user does to achieve a goal (eg contact the call centre or download a form)
Touchpoint	The intersection between a step and a channel (an action and a method) (eg downloading the form online)



Project plan

A team's best guess at how a project will unfold over time

Outcomes

- Clear understanding for project sponsors and the team about why, how and when a project should run

Use when

- Launching a project
- Communicating with senior executives and sponsors
- Adjusting a project's approach or timelines

Project plans are not

- Infallible predictions of how a project will unfold – early, exploratory stages of work often throw up unexpected insights and information that might result in changes to the project's direction

Tips!

Project plans are documents that can be very helpful in managing scope creep as an HCD project unfolds. They should:

- clearly highlight non-negotiables and dependencies (tasks that can't be started until another task is complete)
- clearly articulate anything that is out of scope

Key terminology

Methodology	The team's high-level approach to key stages of work
Objectives	The key questions a project will help to answer; the tangible activities a project might involve or the key areas a project might investigate
Outcomes	The desired outcomes for the project – the results or impacts expected once a project is finished
Outputs	The things the project will produce (eg current state journey map, personas)
Risk	A possible event or condition that has an effect on a project objective, scope, budget, schedule, quality or team.
Scope	What the focus of the project is and (importantly) what it isn't
Team members	All team members, their roles and responsibilities
Timeline	A map of the key stages of work, activities, deliverables and communication over the duration of the project
Ways of working	Any relevant principles or behaviours that the team will follow during the project (eg project huddle every Friday)



Stakeholder engagement plan

A plan for how, when and why a project team will involve and communicate with project stakeholders

Outcomes

- A clear understanding of the project's stakeholders and their needs
- A list of communication activities that should be carried out during the project
- Reassurance for sponsors and executives that staff will be kept in the loop and engaged early as part of any larger change agenda

Use when

- A project is part of a change or transformation program and the team needs to communicate well to ensure their work is integrated with other projects
- There are multiple demands on the time of stakeholders – so careful management of messaging is required

Tips!

Share the insights you generate through your research when communicating with stakeholders to engage them, generate interest and promote the value of research in the HCD process.

Key terminology

Communications plan	A timeline of all communications activities, meetings and presentations mapped to the project plan stages and stakeholders
Stakeholder	Someone who will participate in an HCD project directly (perhaps as a sponsor, a manager, a research participant) or someone who needs to be consulted or informed as a project progresses
Stakeholder map	A visual representation of the various stakeholders involved in a project and their relationship to the project



Insights report

The output from user research, containing insights, stories, opportunities or recommendations backed up by evidence

Outcomes

- Valid, evidence-based information that can be used to inform decisions, strategies, next steps, planning and prioritisation activities

Use when

- You need to understand something about your users, staff or service ecosystem before deciding on a course of action

Insight reports are not

- Strategies – Insight reports might contain opportunities, recommendations, consequences or implications but they should not include strategic plans, road maps or visions unless these have been co-designed, validated and approved
- Summarised reports of raw data – Insights reports contain insights – the ‘so what?’ interpretations of raw data generated by analysing and synthesising that raw data

Tips!

Less is more. Don't spend time creating a lengthy report when a few punchy pages will suffice. After you've completed analysis and synthesis, draft the skeleton of your report with headings, have it approved and then begin filling in the detail.

This is your opportunity to build empathy in staff and stakeholders who couldn't participate directly in user research. Use quotes, photos and diagrams to bring user stories to life.

Key terminology

Data Data is a word used to describe 'raw' observations or results. We collect data to support, refute or generate claims

Insight Insights are interpretations of raw data that have meaning in a particular context to a particular audience. An insight that is not backed up by data is not an insight, it's an opinion or belief

Opportunities Moments in the journey that can be improved – this could be a stage, step, channel or touchpoint



Personas

A fictional archetype, based on user research, that represents a group of people who use a site, service or product in a similar way or who have similar user needs

Outcomes

- A brief, single-page mock biography that helps team members keep the user in mind when working
- A way of summarising common behavioural traits and needs

Use when

- You're beginning to generate ideas for design concepts or start prototyping and you want to keep the needs of particular user groups in mind
- You want to bring to life the differences between different segments in your market

Personas are not

- Real people – Personas are archetypes; representations of an 'average' or 'typical' user within a particular segment

Tips!

- For each persona, include only information that will help you to generate ideas and prototype.
- The persona's needs should always be included.
- Where relevant, you can also include accessibility requirements, channel preferences and purchasing behaviours.

Key terminology

Market segment	A subsection of a greater market or user base that contains users who share common attributes or needs
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Future-state journey map

A journey map that describes a vision for the user experience you want to create

Outcomes

- When used alongside a current state journey map, you can perform a gap analysis and then plan a program of design sprints to make the changes required to reach the vision
- When combined with user scenarios, a future-state journey map can be used to bring a user experience vision to life

Use when

- You want to define and communicate how people should experience your service or product over time
- You want to build a strategy or a vision for the future
- You're prototyping and you want to try to test, validate and define a vision for the future that is desirable
- You want to perform a gap analysis to help figure out the amount of work required to reach the vision

Tips!

Future-state journey maps are most practical when they reflect a single persona's journey. If you have multiple market segments – each with a different persona who will take a different path or journey – it's useful to create a unique future-state journey map for each persona, especially if you intend to tailor the user experience for each market segment.

Key terminology

Channel	Ways a user interacts with a service provider (eg call centre, app, online or face-to-face)
Gap analysis	An analysis of the differences between the current state and the vision for the future, to see what changes need to be made to achieve the vision
Stage	A phase or a group of steps the user goes through to achieve their goal (eg search or register)
Step	A specific action or activity a user does to achieve a goal (eg contact the call centre or download a form)
Touchpoint	The intersection between a step and a channel (an action and a method) (eg downloading the form online)



User experience vision and principles

A way of describing what your organisation is working towards – the future-state experience you’re attempting to create for users

Outcomes

- A clear articulation of the user experience that your project team recommends or is going to work towards; this can include journey maps, user scenarios, system maps, storyboards and prototypes
- Journey maps, user scenarios, system maps, storyboards and prototypes are all ways of articulating your vision

Use when

- Trying to persuade sponsors to allocate funding by bringing to life the user experience you intend to create
- Trying to clearly describe the end goal to another team who will take over the project
- You’re testing a vision or a concept with users in a research setting and you’re seeking feedback on the user experience

User experience vision and principles are not

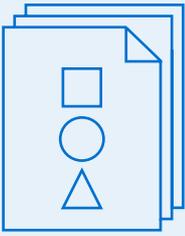
- A plan of action – The vision and the principles simply describe where you are going, not how to get there

Tips!

Decide on the most important elements of the user experience that you need to bring to life for your audience before you decide which format will be most helpful for your visioning output. You may need multiple visioning outputs for different audiences or to help you make more than one point about the user experience.

Key terminology

Principles	Statements that act as touchstones for a team as they work to design a particular sort of user experience
Vision	An output that brings to life the experience you are attempting to build for users



Design concepts

The result of ideation – early outputs that represent ideas before prototyping begins

Outcomes

- A group of possible ideas that can be prioritised, evaluated for suitability and used to define a program of work
- A group of ideas that can be used to begin prototyping

Use when

- You're ready to start ideating (generating ideas) and you have a few good 'how might we' questions
- You need to provide options to sponsors or managers

Design concepts are not

- Prototypes, which are more real and refined than design concepts

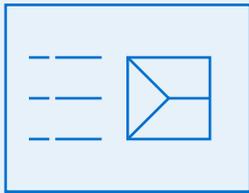
Tips!

Design concepts can be as rough or as detailed as you think is useful. Remember that your set of design concepts will be evaluated for suitability against your acceptance criteria so don't spend more time on them than needed.

Key terminology

Acceptance criteria A set of minimum requirements that a design concept must meet before being further developed or tested, based on user, business and technical requirements

'How might we' questions Leading questions that focus the team on a goal or outcome, for example; "How might we deliver faster service to customers"



Value proposition

A statement describing what it is that your organisation, product or service offers to your users

Outcomes

- A statement that focuses policy, design and marketing efforts on what is truly valuable to a user or stakeholder group

Use a value proposition when

- You have completed research and need to describe current user needs and how your service currently creates value for them
- You have a sound understanding of your market segments and you're ready to produce a product or service value proposition tailored to each market segment
- You want to test the desirability of a new product, service or policy with users and need to validate whether your value proposition is strong enough to encourage adoption

Value propositions are not

- Perfect predictions of user behaviour – What users say is valuable to them during research or a pilot may not carry through to real-world behaviours, sales or adoption

Tips!

Use the value proposition canvas – it will help base your value proposition on your understanding of user needs, jobs to be done and pain points.

Key terminology

Jobs to be done

Jobs to be done is a framework for understanding a user's needs. Its creator, Clayton Christensen, says that people don't simply buy products or services; they 'hire' them into their lives to serve a purpose. We call this purpose the 'job' they are trying to get done. (Read more at www.christenseninstitute.org/jobs-to-be-done/)

Pain point

An issue, problem or moment in the experience that is likely to cause negative emotions or perceptions for users (e.g form is hard to find)



User stories

A way of articulating user needs, written in first person, so that design can begin (from the Agile software development methodology)

Outcomes

- A resource that helps designers and user acceptance testers ensure that the new product, service, website or software has all the required features and complies to standards to meet user needs
- A resource that helps scrum masters (another Agile term) and product managers plan feature backlogs and design sprints
- A resource that helps designers and software engineers to understand the needs of the user, even if they haven't personally participated in user research

Use when

- You're building a backlog or planning a detailed design program of work

User stories are not

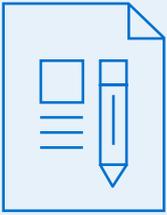
- Technical requirements – Technical requirements are irrelevant or invisible to the user but still critical requirements for a successful user experience

Tips!

Software designers or solution architects rely on user stories to know what to build and why each feature is important. User stories are critical for carrying user insights through to the detailed design stage of work.

Key terminology

Epic	In the Agile methodology, an epic is a complex user story – something that can be broken down into smaller units (a set of user stories) that makes sense to work on as a block
Sprints	In the Agile methodology, sprints are short cycles of design work
User stories	Descriptions of user needs written in the first person, usually in the format: 'As a [user type], I need to [action / behaviour / feature], so that [benefit]'



Prototypes

A simulation, demo or mock-up of a site, product or service that you can use to test your ideas before beginning to build

Outcomes

- The ability to quickly communicate a design concept and to test its desirability, feasibility and viability before investing time in building it

Use when

- You need to conduct user testing
- You need to attract funding or approval

Prototypes are not

- Design concepts – Design concepts are ideas written down on paper. Prototypes are tangible creations intended to be used for testing and research

Tips!

Prototyping is critical in the human-centred design process. Without prototypes, it's difficult to assess whether your proposed design concept meets user needs. Only prototype to the level of fidelity required to answer your testing questions!

Key terminology

Fidelity Low-fidelity prototypes are rougher, faster versions of the design concept than high-fidelity prototypes



User scenarios

A simulation or a hypothetical narrative that describes how a user might interact with a product or service and accomplish a particular task

Outcomes

- A way of explaining or bringing to life a vision for a future-state user experience
- A description of a situation that can be used during visioning and testing

Use when

- You want to describe to test participants how people might experience your service or product
- Testing a prototype during a user testing activity

User scenarios are not:

- User stories – User stories are descriptions of user requirements and are collected to build a backlog of work to be completed to develop the product or service

Tips!

User scenarios are a great way to help a test participant imagine themselves in a situation and complete a task using a prototype. It's important to test enough user scenarios to check whether your prototype caters to all your user needs. Scenarios are also critical for testing feasibility.

Key terminology

Scenario	A realistic situation in which a user might find themselves, where the user has defined goals, motivations, constraints and preferences
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Wireframe

An interactive prototype that demonstrates various interface elements (buttons, forms, menus etc.) of a web page or application

Outcomes

- A prototype that can be used to test your assumptions and gather feedback. It can be very quickly updated or changed in order to re-test

Use when

- You're beginning to flesh out your design concept
- You need to conduct user testing

Wireframes are not

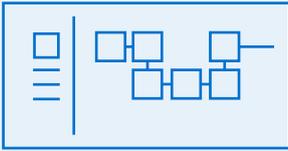
- Supposed to include everything or look like a finished product. They are only used for drafting and testing
- A design mock-up – A wireframe is only intended to test how the interface elements work, not how they will look

Tips!

There are many digital tools available to create wireframes that simulate the experience of using a website, app or software. Common tools are Sketch, Figma, Invision, Axure and Omnigraffle.

Key terminology

Clickable prototype Clickable prototypes are essentially high-fidelity wireframes that can be 'clicked' as if they were a live site



Service blueprint

A journey map with key operational processes mapped underneath, used to capture and assess how a service organisation completes various tasks across a user journey

Outcomes

- A tool to evaluate how efficiently an organisation completes steps in the user journey
- A tool for visualising and prototyping changes to organisational processes, systems and tools

Use when

- You want to look for opportunities to improve operational efficiency
- You want to solve user pain points that you identified during user research

Service blueprints are not

- Journey maps – Journey maps are visual representations of a service experience from a user's point of view. Service blueprints map out operational processes underneath journey maps

Tips!

Service blueprints are important service design tools. Often you can't improve a service experience unless you change something operational about the service organisation.

Key terminology

Back of house	Systems, processes, tools and staff that are hidden from the user, but critical to the completion of each step in the journey; usually presented underneath the front-of-house interactions on a service blueprint
Front of house	All user-facing touchpoints and interactions should be visualised directly beneath the user journey
Line of visibility	A dotted line placed on the journey map to indicate which elements of the operation a user can witness and which are hidden from view
Pain point	An issue, problem or moment in the experience that is likely to cause negative emotions or perceptions for users (eg form is hard to find)



Discussion guide

A reference tool that researchers use during qualitative research containing details about how each research session should be conducted

Outcomes

- A statement of what is to be discussed and how it will be discussed during each research session
- A tool to ensure consistency across research sessions, regardless of how many different researchers there are conducting sessions
- A discussion guide highlighting the important topics of conversation and the important hypotheses or objectives that the researcher needs to investigate

Use when

- You're preparing for research sessions
- You're in the middle of a research session and need to confirm you're sticking to the plan and haven't forgotten anything

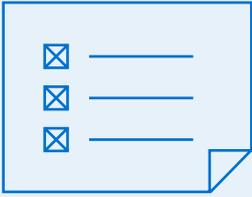
Discussion guides are not

- Surveys to be read aloud – Most exploratory research sessions are not about asking a fixed set of questions and writing down answers – that's what surveys are for
- Prescriptive about the order of topics for discussion – this is controlled by the researcher conducting each session

Tips!

Discussion guides are a good way of ensuring that someone else can replace you in a research session without much difficulty if needed. Make sure there's enough detail in your guide to allow for this.

Create a mind map in your discussion guide that can act as an 'at a glance' reminder of the key elements you need to explore in the interview. Lists of questions to tick off often results in researchers reading through the list of questions, which is not the point! Mind maps help researchers stick to a plan while being flexible to the dynamics of real contextual conversations.



Design principles

Statements capturing the intent of a new design without specifying the solution

What you get

- A set of statements, summarised from discovery work, that distill the user goals and communicate the key characteristics of the product or service to a wide variety of stakeholders, including clients, colleagues and team members

Use when

- You need a concise summary of discovery work
- Design and implementation teams need to reference discovery work without knowing the detail
- You want to ensure that user needs are used to shape and guide the idea-generation process
- You need to keep complex, multi-stakeholder projects moving together with a coherent vision of what you hope to achieve

Design principles are not

- KPIs – Key performance indicators define measurable impacts of a successful user experience
- Rules – Design principles should not attempt to impose rules. Instead, they should be concise summaries of intent that guide solutions
- Specifications – Design principles should never include specifics of a solution. They may include guidance on what is likely to contribute to a good experience (such as 'mobile only' or 'mobile first')

Tips!

Combine best practice design principles, like 'be accessible' and 'be usable' with project-specific principles.

Key terminology

Discovery activities	Project activities (including research) that aim to uncover insights and explore customer lives, needs and contexts
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Problem definition

Explanations of what work needs to happen and why it is important work to do – the motivators of design activity

Outcomes

- Alignment among all stakeholders as to why a project needs to exist and what its purpose is

Use when

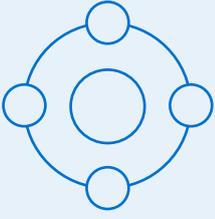
- Writing a project scope and briefing document
- Creating a request for quotation
- Hosting a project kick-off workshop
- Establishing design principles for your project

Problem definitions are not

- Solutions in the form of a question
- Prescriptive

Tips!

This is the most challenging and important aspect of the design process. Finding the right problem to solve is the task that will require the most attention.



Market segmentation

A breakdown of a customer base or population into groups that share attributes or needs

Outcomes

- A tool that can be used to create personas for designing and testing value propositions
- An understanding of the important subgroups within the market, which can assist with market strategies, policy and so on

Use when

- You need to design tailored experiences for the needs of different groups

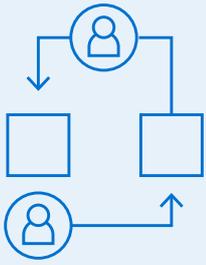
Tips!

There are many different ways to segment a market. Demographics are often used. Needs-based segmentation is often more helpful for product and service design projects.

Personas are most useful when they represent a single segment within a market.

Key terminology

Persona	A fictional archetype, based on user research, that represents a group of users who use a site, service or product in a similar way
----------------	-------------------------------------------------------------------------------------------------------------------------------------



System map

A visualisation of the interactions, relationships, variables, actors, processes and exchanges in a service or policy space

Outcomes

- A sound understanding of the bigger picture around a problem

Use when

- You're working in a complex context with lots of actors or variables you need to make sense of
- You need to decide who to speak to during discovery research
- You need to create a vision or a strategy that makes sense in a complex context

System maps are not

- Journey maps – Journey maps are technical artefacts that must include certain features and elements
- Service blueprints

Tips!

System maps are only helpful if they assist your team to make sense of complexity. They are a tool, nothing more.

System maps can just be written up on a whiteboard – they don't usually need to be digitised or published.



Opportunities and recommendations

An output of research that highlights important things or 'so whats' that require attention and action

Outcomes

- A clear set of suggested next steps for stakeholders to consider
- A summary of possibilities and areas of focus for further investigation

Use when

- You're transitioning between research and design phases – when you have finished a cycle of learning and are ready to begin planning to act or decide
- When you want to clearly advocate for a course of action or highlight areas that are important for the project to focus on next

Opportunities and recommendations are not

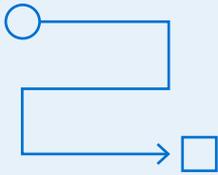
- Strategies – Strategies involve a current state, a future-state and a plan of action to get from here to there
- A list of actions to be undertaken without any further thought

Tips!

Research often produces some insights that aren't particularly relevant to the problem statement. These insights can be added as an appendix to the insights report as these are less interesting or meaningful to senior organisational audiences.

Key terminology

Opportunities Moments in the journey that can be improved – this could be a stage, step, channel or touchpoint



Implementation road map

A one-page visual summary of how a program of work will move towards a desired future state, launch or release date

Outcomes

- A clear visual plan for a program of work for project managers, product owners and scrum masters to use and own

Use when

- You need to build a timeline for implementation
- You're tracking progress against a timeline during implementation
- You need to coordinate activities across a larger program so that implementation runs smoothly and is integrated

Tips!

Implementation road maps are a communication tool for broad conversations. They only require enough detail to convey the big picture of how a program of activities is sequenced. Save the detail for other pages and keep this one-pager simple.





Case studies

Single Digital Presence

How can government create digital content faster while being more user friendly?

As government services and information moved online hundreds of independently created and managed websites were built across the Victorian public sector.

This fragmented approach meant that websites:

- used many different designs and content management systems
- displayed siloed, outdated and contradictory information
- didn't meet privacy, security and accessibility standards
- became expensive and burdensome to develop and maintain

For citizens it led to confusion, wasted time and reduced trust in government, plus a poor user experience.

To solve these problems, Digital Design and Innovation knew at least two things needed to change:

- how public servants were writing for the web
- how and when, we designed and built websites

Employing HCD principles, the SDP project designed content guidelines, pair writing and a government platform based on open source technology and a pattern design library. The team had to consider the sometimes competing needs of citizens, content producers, website owners and DPC (as supplier). They researched, tested and improved on ideas to deliver the first version of the SDP platform, that vic.gov.au publishes on today.

Project goals

Single Digital Presence aims to:

- Make it easier for citizens to find, understand and use Victorian Government information
- Deliver a flexible, integrated solution for building government websites quickly and cost-effectively
- Reduce duplication and invest in innovation

Time frame and budget

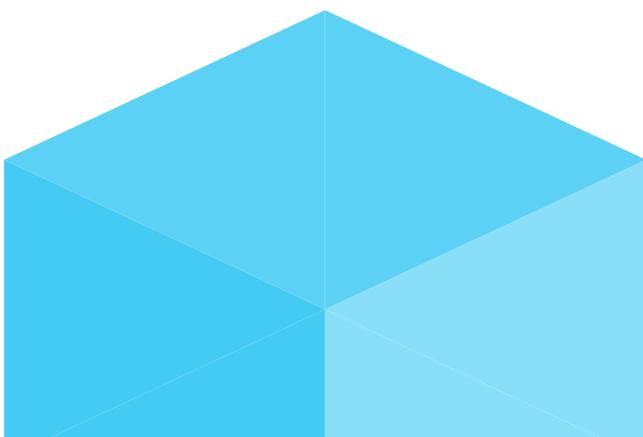
Time frame: 12 months (to MVP)
Budget: \$450,000

Team

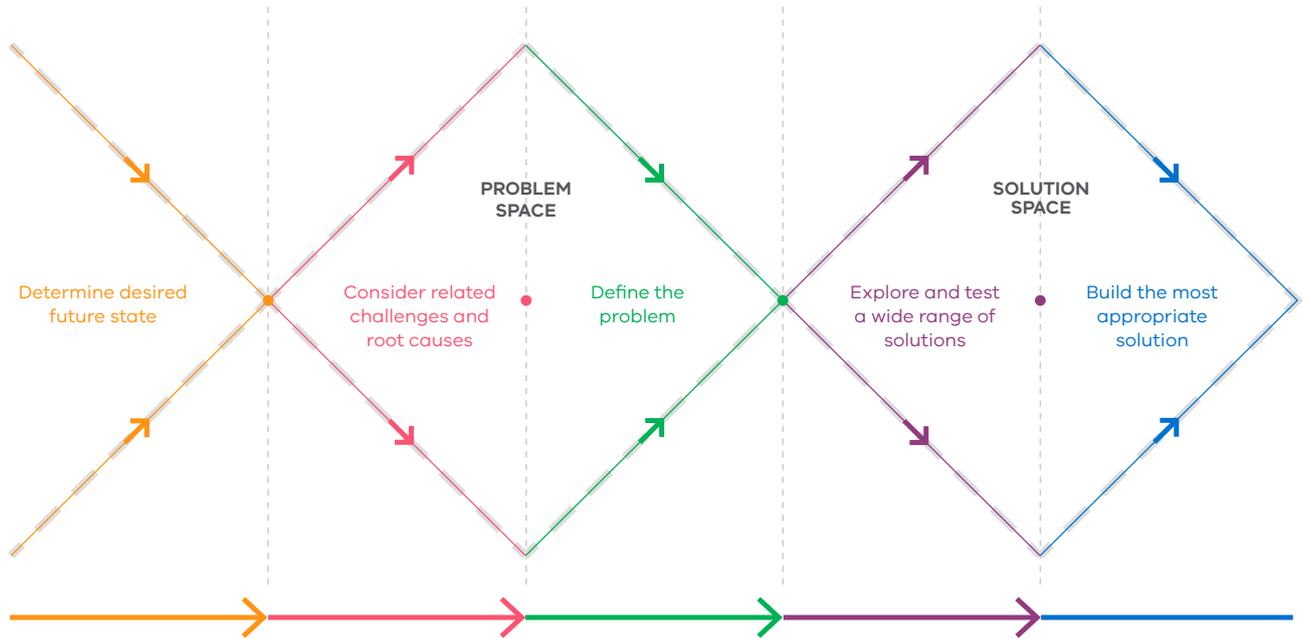
Team size: 20
Key contact: Amber Benjafield

Outcome and results

- Dynamic application of Brand Victoria to provide a consistent, accessible user experience across the content of multiple Victorian government organisations
- A single framework that satisfies the requirements of numerous departments and entities
- Content that helps Victorians achieve their objectives
- A digital-first approach to government information



Single Digital Presence design process



Align

Discover

Define

Develop

Deliver

2 weeks

3 months

3 months

6 months

3 months

METHODS

- Stakeholder interviews
- Project kick-off workshops
- Stakeholder interviews

- Ethnographic research
- Research synthesis (Huddle)
- CMS research
- Community workshop with home buyers
- Landscape review
- Stakeholder interviews
- Subject matter expert interviews (eg. Aboriginal Victoria)

- Problem definition (SSP)
- Rapid prototyping

- Wireframes
- Concept design
- User testing (citizen focus)
- Card sorting
- Tree testing
- Subject matter expert & interviews
- Stakeholder walk-throughs and collaboration

- Alpha (MVP)
- Accessibility testing
- Design review

OUTPUTS

- Stakeholder engagement

- Personas
- Research reports
- Customer journey map
- CMS selection

- Business case
- Voltron (prototype)
- Minimal viable product (MVP) requirements for alpha

- Style tiles
- Digital prototypes (Sketch, InVision)
- Page layouts
- Collaboration space

- Minimal viable product (MVP) design system

IGNITE: Workplace of the future

How do you involve staff in designing the way they work?

The Department of Premier and Cabinet (DPC) was keen to be more agile and collaborative. The Ignite team knew the physical work environment and the technology were critical parts of making this happen.

However the most important part was the human element. Moving to a digitally-enabled, modern workplace would challenge culture and behaviour. The risk was staff would not embrace the change.

To manage this, staff were asked to participate in the design of the workplace they were seeking. The Ignite team used human-centred design methods, tools and mindsets to bring hundreds of staff along on the design journey.

Project goals

The IGNITE project aimed to:

- reduce or eliminate travel time between offices
- improve collaboration and communication between colleagues and visitors
- enable more flexibility in the workspace and work arrangements
- offer modern, superior building and office amenities

Time frame and budget

Time frame: 12 months

Budget: \$80,000 (co-design component:

Discover and Define stages)

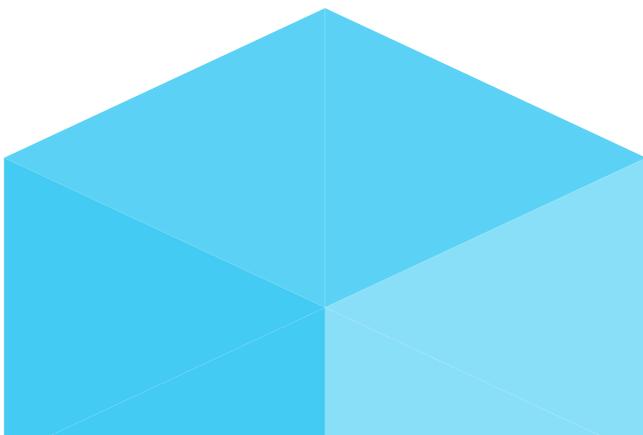
Team

Team size: 4

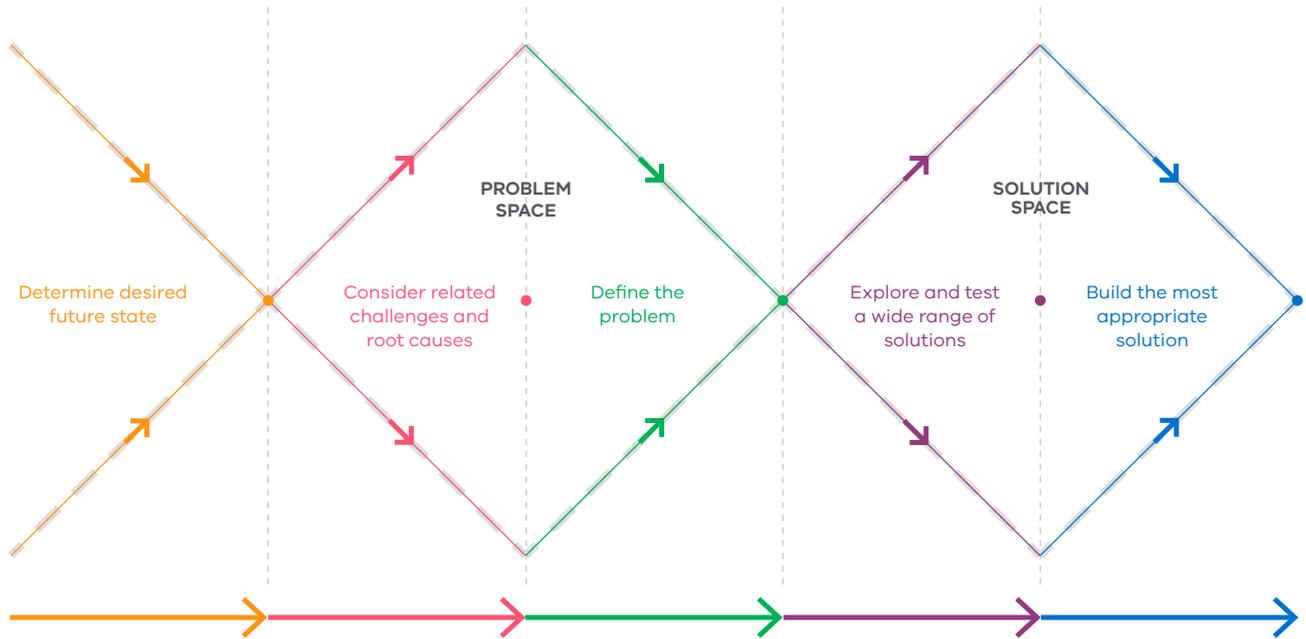
Key contact: Simone Millen

Outcome and results

- The IGNITE project transformed the DPC workplace. It included the rollout of premium digital technologies and tools to sustain an engaged, empowered and high-performing workforce. It created environments that support staff to structure their working life in a way that works for them, allowing greater autonomy and flexibility in how work gets done
- Hundreds of DPC staff and subject matter experts engaged with the design process in a targeted and representative staff consultation that provided a deep understanding of DPC's workplace requirements than ever before
- There was almost no variation or changes (detailed design) after the architects delivered their plans. This is very rare and reflected how well staff requirements were captured in the co-design process. There were no nasty surprises that needed to be accommodated. New workspaces were delivered to DPC staff quickly and at a reduced cost
- The design of the workspace is self-replicating across government – other departments and agencies are now looking to DPC as leaders in workplace transformation



Ignite design process



Align

Discover

Define

Develop

Deliver

1 month

1 month

6 weeks

3 months

4 months

METHODS

- Forming Project Control Board and Project Reference Group
- Identifying representatives from each area of DPC for the PRG
- Stakeholder mapping
- Gathering data and requirements through stakeholder interviews
- Project initiation document

- Survey
- Diary studies
- Site visits
- Co-design workshop to explore needs (52 requirements – HM)

- Ideation/sketching
- Paper prototyping of floor plans
- Prioritising ideas
- Discussing constraints

- Executive visioning workshop
- Functional briefing interviews with branch representatives to gather detailed requirements (inclusive design)
- Tech working group
- Sustainability working group
- Branding and identity working group
- Storage audit
- Detailed design concepts and prototyping

- Branch roadshows
- Weekly working group meetings
- Weekly communications
- Clause 10 consultations
- Workplace experience workshop
- Induction sessions
- Post-relocation on-site support and feedback (lessons learned)
- Alpha (Minimal Viable Product)

OUTPUTS

- Project vision
- Project plan
- Stakeholder register
- Communication plan
- Risk register

- Insights report (high level)

- Workplace tech requirements
- Digital Employee Experience (DEX)
- Low-fidelity prototype of floor layout
- Video process (storytelling)
- Board submission (co-design report)

- Fly-through video
- Service prototype recommendations (chairs, tables)
- Detailed design docs (floor plans, elevations, tech specifications, finishes/palette)
- Storage report
- Intranet communications
- Stack plan

- Change management strategy
- Working (physical and digital)
- 5 floors (design and fitout, new tech, in all spaces, new devices and community management)
- Trello board (visible kanban)

Community Crime Prevention

How do we measure the effectiveness of community driven safety campaigns?

Over 12 weeks in 2019, the Community Crime Prevention Unit (CCPU) conducted a discovery project to help them create a new digital engagement and content strategy.

The CCPU, and their partners in the Community Safety Networks program (including Victoria Police, Neighbourhood Watch, Crimestoppers and CarSafe) were unsure of the effectiveness of the campaigns and materials they currently produced. They needed a clear understanding of their community needs.

They engaged a design consultancy to conduct research in the community across metro, regional and rural Victoria to provide insights into:

- How and why do people in Victoria engage with and use community safety and crime prevention information?
- How do people learn crime prevention strategies?
- What kinds of new information are likely to lead to new crime prevention action?

Project goals

The aim of this project was to help CCPU, their partners and stakeholders understand community needs when it comes to crime prevention and community safety information.

The intended outcome was for CCPU to use these findings to produce information that helps communities become better informed and supported to prevent crime and feel safer.

Time frame and budget

Time frame: 12 weeks

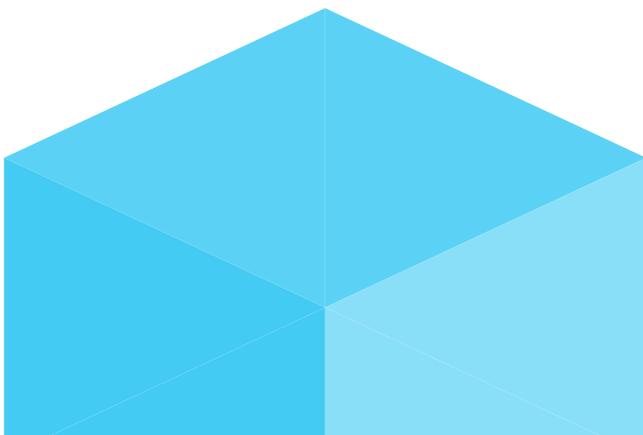
Budget: \$150,000

Team

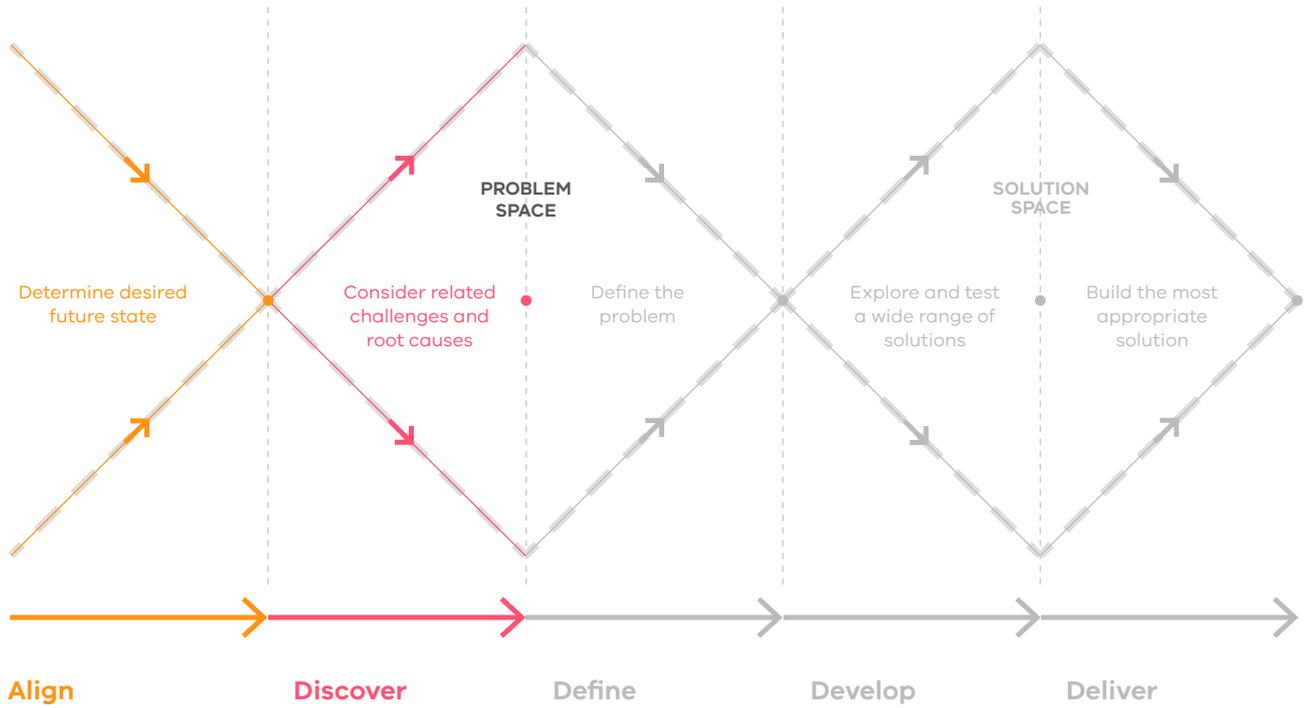
Team size: 3

Outcome and results

- An insights report that helps CCPU understand the diversity and complexity of community needs when it comes to crime prevention information
- A set of personas that allows CCPU and partners to design and tailor their information in line with a focus on community needs
- An information delivery framework that will help Victoria Police, Crimestoppers and other partners to tailor their communications for greater impact



Community Crime Prevention design process



1 month

2 months

METHODS

- Project kick-off workshop
- Stakeholder workshop
- Stakeholder interviews
- Stakeholder relationship mapping

- Landscape review
- Ethnographic research (27 participants)
- Affinity mapping
- Research synthesis

OUTPUTS

- Project vision
- Project plan
- Stakeholder engagement plan
- Discussion guide

- Personas
- Design principles
- Insights report





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visit www.vic.gov.au/designplaybook

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