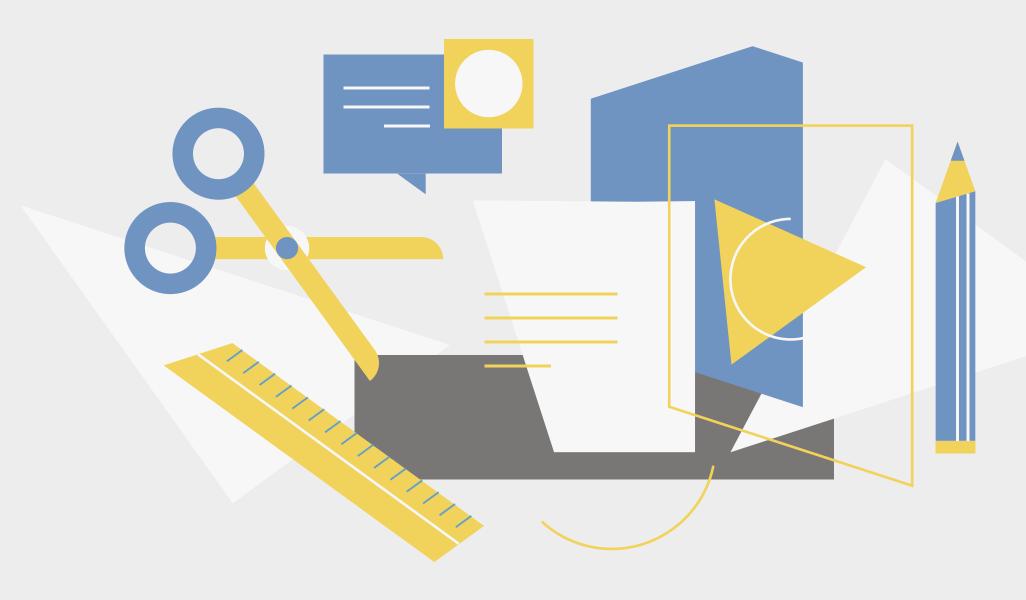
Designing for Public Services

IDEO

DESIGN FOR EUROPE

Nesta...



This guide has been created by...

Nesta

Nesta is an innovation charity with a mission to help people and organisations bring great ideas to life. Dedicated to supporting ideas that can help improve all our lives, its activities range from early stage investment to in-depth research and practical programmes. Nesta recognises the need to strengthen the foundations for innovation within organisations, and that the skills required to bring innovation to life must become part of an organisation's culture to create meaningful impact. Its Innovation Skills team works closely with

social and public sector organisations to help embed these skills, while also advising more broadly on how to develop and increase innovation capacity.

Design for Europe

This guide has been made possible with support from Design for Europe, a three-year programme co-funded by the European Commission to boost design and innovation across the continent. Find out at more at designforeurope.eu.

IDEO

IDEO is a world renowned design and innovation firm with over 30 years experience of working across the private, public and third sectors. As a global organisation, it has deployed its learnings globally in governments in the US, Europe and Asia and at local, state and national levels. IDEO's non profit arm, ideo.org, leverages the firm's experience in supporting government development agencies and foundations to solve problems. IDEO has been practising design thinking to make tangible a human-centred approach to

problem solving. Now the firm uses its approach to tackle increasingly systemic challenges, from building a unique school system in Peru to solving agricultural production challenges in Ethiopia.

IDEO



Nesta...



"Design is one of the most important drivers of the quality of experience for users of services. For governments to remain credible to their citizens, they must treat the design quality of their services as seriously as the best businesses."

- Tim Brown, CEO and president, IDEO

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Introduction

Welcome to this collection of practical tools and methods for using design in public services. You have made it this far in your journey, so hopefully you are already aware that design is not just for designers – everybody has the capacity to design!

Historically, designers have lived parallel lives to policymakers and public administrators. But this is changing as governments across the world experiment with design and innovation methods. This might include bringing in expert design support, but we also believe that anybody can start exploring with these same methods. They can help strengthen your understanding of citizen needs, add value to daily work practices and bring new life to old problems.

In this guide we introduce you to a process called design thinking and a set of tools and methods that underpin it. Together, they offer new ways to do things differently and provide you with guidance on how you can introduce them into your day-to-day work in the public sector. They will encourage you to see things differently and give old challenges a new perspective. These tools and methods are commonly used by designers across the world and are the bread and butter of our creative industries. They can be adopted by any sector and be used to inspire the progress and innovation we all strive for.

Learning to use these tools and methods will be like learning any new practical skill. It's true, you can't perform a piano concerto after a few piano lessons — it's all about practice. So, don't look at them as a silver bullet, and instead build your confidence by trying them out. Apply them to different stages of a project and involve others in exploring them.

We hope you enjoy!

Why design thinking in government?

Design thinking has been practised by design and innovation firm IDEO for decades.

The private sector has been on the journey of building design capabilities in its organisations for many years. More recently, we are seeing governments embarking on a similar journey. Dependent on where you are in the world, there are a number of reasons why design thinking is becoming a valuable methodology for governments.

Citizen trust in many governments continues to decline. Citizens believe their governments have lost sight of who they are and what their needs are. Design thinking is a human-centred approach, meaning that it starts with people's needs (and considers both citizens and civil servants). The nature of this approach puts people back in balance with what they're doing at a time when both citizens and civil servants feel they are being led by processes and regulation, rather than enabled by them.

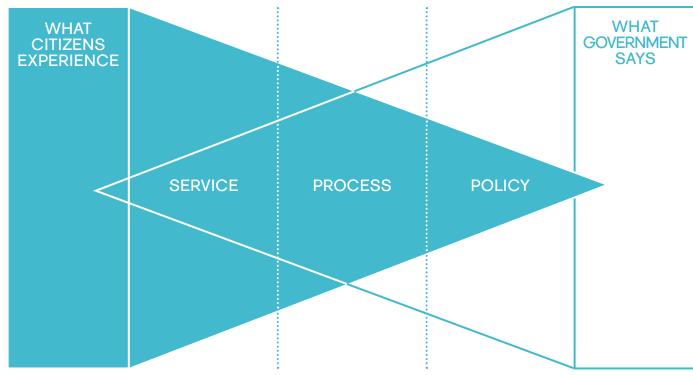
Financial pressures are really biting in many countries so simple cost cutting measures are no longer enough. Many governments need to think much more fundamentally about how they deliver services, and so innovation has been put on the agenda. Design thinking is an innovation approach and its tools and techniques can lead to significant changes in both policy design and service delivery.

There is a separation between those who make policies and those who deliver the services, and this often results in an incoherent service experience for citizens. A design led approach connects these dots, with both policy design and delivery being considered concurrently rather than sequentially, and quite a number of governments are now experimenting in this space.

Irrespective of where a government is in the world and their local challenges, there is one common issue: a shift from 'designing from the inside out' to 'designing from the outside in'. Governments drive the change they want to see and tend to focus on delivering in a way that is most efficient for them.

As a result the desired change often misses the mark with citizens. Using design approaches puts in balance the desired changes of a government with the desires of the citizens. It is ultimately about creating tangible and positive impact.

TRANSACTION BASED



BUILDING RELATIONSHIPS

EASE Introduction REL 02 03 — LEARN 01 — BUILD

Expanding a portfolio of methods in the public sector

Working in the public sector, you may be familiar with other problem-solving approaches typical in government such as Lean Management, Six Sigma and Business Process Re-engineering.

All of these methodologies share three common attributes:

- They are led by designing from the 'inside out'
- They tend to be driven by quantitative data
- They are highly structured and linear in how the projects flow
- They are most often deployed when optimisation of existing services is the goal.

In the online space, most governments deploy waterfall methods of designing, building and deploying software services. This is also a linear process that tends to start with the needs of the government agency, which are articulated through requirements documentation.

Design thinking is one of a new set of approaches that governments have been experimenting with more recently, along with Lean StartUp and Behavioural Economics. These three methodologies also share common attributes:

- They are informed by quantitative data and inspired by qualitative data about citizens
- They are iterative, test-and-learn approaches
- They are most often deployed when innovation is the goal.

In the online space, governments are experimenting with tools and methods of Agile Development when designing, building and deploying software services. Again, this process is highly iterative and inspired by the needs of citizens (in balance with the requirements of the government).

"Increasingly, the public sector has to deal with uncertainty rather than risk, and it is good at managing risk but bad at managing uncertainty. Design offers the capacity to engage with user needs and social needs, and to take a prototyping approach to solutions. This is a way to build a bridge between uncertainty and risk."

Why the move to these new approaches?

The reasons somewhat vary dependent on the circumstances a government department finds itself in.

The sense of less certainty.

Governments at all levels are embracing ever growing levels of complexity and in increasingly uncertain times. There is a sense that even all the questions are not quite understood, let alone the answers, so the idea of deploying innovation approaches is appealing for many.

Cost-cutting measures.

Many governments require
more fundamental change so
are adopting approaches more
associated with innovation. In the
online space, there is evidence that
deploying agile methods has many
advantages — one of them being
that over time, it is a cost-effective

way of building and iterating software services as the needs of government and citizen change.

Irrespective of where a government is in the world, there is a common challenge: creating greater connections between citizens and governments. The new set of approaches all start with people.

This guide primarily focuses on the tools and methods associated with design thinking, however, in Chapter 5 we do draw in several tools and methods from other approaches that are highly valuable when thinking about prototyping.

Marco Steinberg, government innovator and founder,
 Snowcone & Haystack, strategic design practice for government

What kinds of value is design thinking delivering?

These new approaches are relatively nascent in the public sector, but across the globe governments are seeing higher citizen satisfaction scores on the services they deliver.

In governments that are experimenting with design in the policy formulation space, early signs suggest they are designing policies that connect more closely with citizens, and therefore are more likely to hit the mark when implemented.

So, there is a lot of evidence emerging in terms of citizen value.

From our experience, we are also seeing benefits for civil servants too.

In governments across the globe, civil servants report that they feel led by processes and regulations, rather than being enabled by them. Putting people back in the heart of problem solving is creating a new balance between people and processes/ regulations. Civil servants themselves are now part of the picture.

Working for a government is highly meaningful for most staff, and they want to make a positive difference to the lives of citizens. These newer methodologies are informed not just by quantitative data but qualitative data too — spending time with citizens, enquiring and unearthing their needs. This is a critical process point, but by carrying out these

activities civil servants also report feeling a sense of reconnection with why they joined government. They are personally re-connecting with the citizens they set out to serve.

This is all positive news, but that doesn't mean that these new methodologies should replace more established ones. They shouldn't be used in every situation either. Instead, we believe that governments which have an expanded toolkit will be better equipped to take on an uncertain future. The future will be about considering the nature of the challenge at hand, and deploying the right methodology against the challenge. Getting to know the tools and methods in this collection will help you to achieve just that.



"Design methods can bring a vital new energy to public services by helping them to listen to citizens about their lived experiences, prototyping fast and learning by doing, and using visualisations as well as texts. All of these quicken the pulse of innovation and help governments get to better solutions more quickly."

— Geoff Mulgan, CEO, Nesta

Case study, Singapore

Work Pass Division, Ministry of Manpower



The job of the Work Pass Division (WPD) in Singapore is to process work permits for foreign workers, who comprise about 40% of Singapore's workforce. It was generally considered the most efficient department of its kind in the world, and yet, customer satisfaction scores demonstrated there was more work to do. Several rounds of Business Process Re-Engineering had driven their efficiency and the team turned to design thinking to consider more broadly the customer experience of their services. The team at the WPD worked with IDEO over a period of three years. Together they tackled the customer experiences in the service centres, how they communicated with customers through all written communications and even re-structured the department away from internal process and towards industry sectors. In one example of impact, the Employment Pass Service

"The most important lesson we learnt from our customers was that being world-class is all about 'values'. It made us ask ourselves how we could turn speed and efficiency into a holistic customer service experience that our customers valued."

— Penny Han, Director, Work Pass Division

Centre — which processes the permits for all incoming white collar workers — saw its customer satisfaction ratings shoot to 5.7 out of 6 after the launch of the new experience design. Additionally, the centre is now able to process more than 95% of visitors within 15 minutes. WPD concluded; "It seems that when you aim to improve the experience, you also improve efficiency". The combination of using Business Process Re-Engineering and design thinking has ensured it is a world leader in terms of efficiency and customer experience.

"Leaders can create the conditions for innovation; encouraging their people to empathise with users, generate new solutions and test and adapt them over time. It calls for a blend of humility and curiosity, patience and perseverance."

- Brenton Caffin, Director of Innovation Skills, Nesta

A note on leadership

The job of leaders both in the private and public sector is becoming rather more complex.

We predict that the leaders who will succeed in the future will be those who have the following abilities:

- The ability to ask the very best questions
- The ability to choose the right methodology against a particular problem and knowing how to govern the work, methodology dependent.

Using the methods and tools in this collection will help these leadership qualities to emerge — not just in terms of hierarchy, but also in how you as an individual can effectively drive change.

More and more we are seeing that governments need to rethink what they do rather more fundamentally, and the problems they are tackling usually come with a higher degree of uncertainty. In some cases, the problem is not well understood at the outset, let alone the solution. Newer approaches such as design play well in this space.

In the future, leaders will be required to become more modal in terms of how they govern, switching between governance styles depending on the nature of the problem and the methodology deployed against it. It may be an anxious time for many governments but it is also an exciting time. The need and opportunities for innovation abound!

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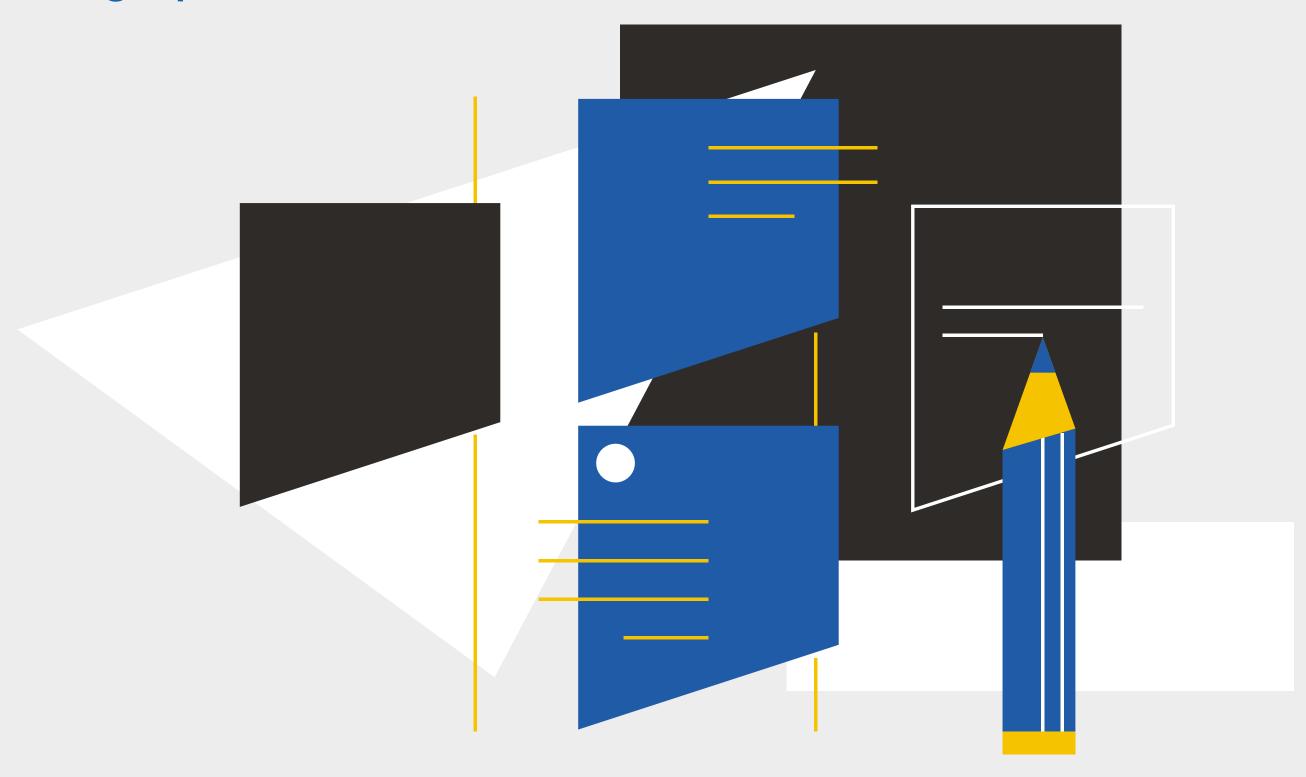
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Introduction

First things first — the flow of a design led project looks and feels very different to other approaches you might be familiar with.

We mentioned in the introduction that methodologies such as **Business Process Re-engineering** are usually deployed when the objective is to optimise what you already do. Design led approaches are more often deployed in service of innovation, when you want to rethink what your policy is or how it is delivered to citizens. Innovation requires inspiration and divergent thinking — meaning you'll explore many different solutions. Ever sat in a brainstorm with your team and kept coming up with the same ideas over and over?

The flow of a more traditional project generally looks and feels like a convergent problem solving

process, where you focus on coming up with a particular solution. This is appropriate if you are looking to improve what you already do, for example by increasing the efficiency of processing income tax returns. You will already have a lot of knowledge and experience in the area and not seeking to make fundamental changes. When you are looking to completely rethink an area - for example if a policy is simply not achieving your desired outcome, or you are feeling overwhelmed by negative citizen feedback on a service you deliver – the flow of the project will be a combination of divergent and convergent thinking.



"We are heavily programmed at work to have the answers to problems, and to have them as quickly as possible. But not all problems are created equal. Divergent thinking is critical when you are looking for very new solutions. This can feel very uncomfortable at first; you have to get used to the fact that you won't have the solutions in the early part of your project and you may have a feeling of uncertainty. With practice and experience though, this way of working becomes second nature."

- Andrea Kershaw, Partner, IDEO

Exploring the challenge

You know the challenge area you want to address, perhaps even the problem you want to solve. But is it the right one? Step back and open it up by thinking about it from different angles.

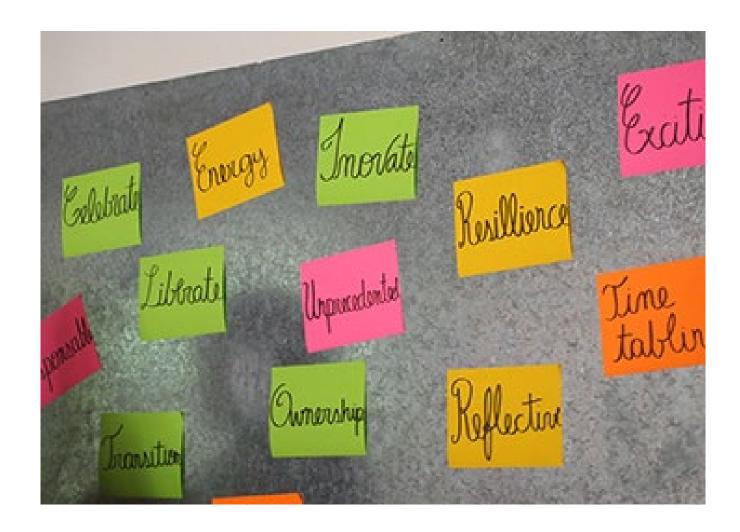
You think you know what the problem is. It's simple, right? But sometimes what at first seems to be the issue is just a symptom of something deeper. It's important to see things through fresh eyes, and to open up your challenge by thinking about wider issues and influencing factors. Examining it from a number of different angles can help you uncover alternative perspectives, and this in turn will help you create a stronger brief for your project.

Doing this as a group helps bring everyone behind the problem from the start. You may also think about involving other stakeholders such as service users or staff.

Steps

- O1 With your team, identify the specific issue you want to reflect on and why you think it is important.
- The key aim here is to capture, compare and discuss different viewpoints on the problem. You can then review the notes and discuss with your team members whether you are making the same assumptions, and whether you are framing things in the same way.
- O3 Discuss and write down on Postits who it is a problem for, and what social and cultural factors shape the problem. Think about what evidence you have that this particular problem is a significant one that it is worth investing in.
- Now, taking your notes into account, explore different ways of viewing the problem. Can you look at it from different perspectives?

o5 This exercise might lead you to 'reframe' the problem you initially addressed, which can then offer clues as to the direction of your project.



Creating a challenge brief

Great briefs drive great outcomes, so create one that truly tries to define your challenge area, sets the course and frames the opportunity space.

Having explored your challenge, it's then important to align on a challenge definition as a team that excites, inspires and ensures focus. If a challenge brief has strong foundations and is bought into by the team, then it's more likely that it will be referred to throughout the project. A good brief centralises thinking, maintains intent and helps keep everyone on track as they may dip in and out of the project over time. It should be broad enough to spark new directions, yet focused enough to help teams innovate.

It's also important that we ask the right question by centering on human need first, instead of starting with policy, business, product or service goals. A challenge brief is responsive, not rigid. It is meant to provoke new thinking, invite contribution from various users, and create room to evolve. A 'brief template' worksheet can be found here.

Steps

- O1 Phrase the challenge brief from a user point of view.
- O2 Articulate the challenge in an optimistic, inviting tone, often as a "How Might We...?"
- O3 Use action verbs and aspirational goals that encourage people to take on the task at hand.
- O4 Make sure it doesn't presuppose a solution.
- 05 Take out words with bias.

Brief template

- The design challenge: How might we...
- Why is this challenge important? How would you describe the problem you were solving for or the new opportunity you are looking to leverage and why it matters?
- Do you already have stated ambitions? If so, what are they?
- What research and resources do you already have? (Trends, bespoke research, etc.)
- What is the project plan?
- Who's involved? (Core, extended, leadership team, etc.)

Case study, Denmark

The Danish Ministry of Employment, MindLab



Since 2013, Danish public innovation lab MindLab has been working with Denmark's Ministry of Employment to reform a number of employment services — many looking at radically new ways of dealing with long-term unemployment and vulnerable citizens. One of the main elements has been to create a shift from a focus on activity to a focus on outcomes for citizens. This has been done by exploring how to best invest in creating positive change in the citizens' situations through interdisciplinary collaboration and greater professional freedom in case processing. To enable this shift, MindLab began a process of merging development and implementation: using ethnographic methods to explore how employment processes really worked for citizens, in job centres and in the everyday practice of frontline staff. They then used this research to engage national decision-makers and local practitioners in collectively analysing insights, cocreating new ideas and co-designing a number of activities in order to productively put the new reforms into practice.

"One of the main elements has been to create a shift from a focus on activity to a focus on outcomes for citizens. This has been done by exploring how to best invest in creating positive change in the citizens' situations."

The project has since evolved into a strategic partnership between the ministry and MindLab where human-centred design is being applied and experimented with in other phases of the policymaking cycle. This is resulting in various new ways of connecting policy and practice — including mandatory internships for policymakers alongside local case workers, and practice-oriented preventive units focusing on quick adaptation of failing reforms.

Planning your project

Plan your project by considering the challenges, outcomes, resources, and deliverables. Paint a picture of timing, with layers of engagement and progress markers.

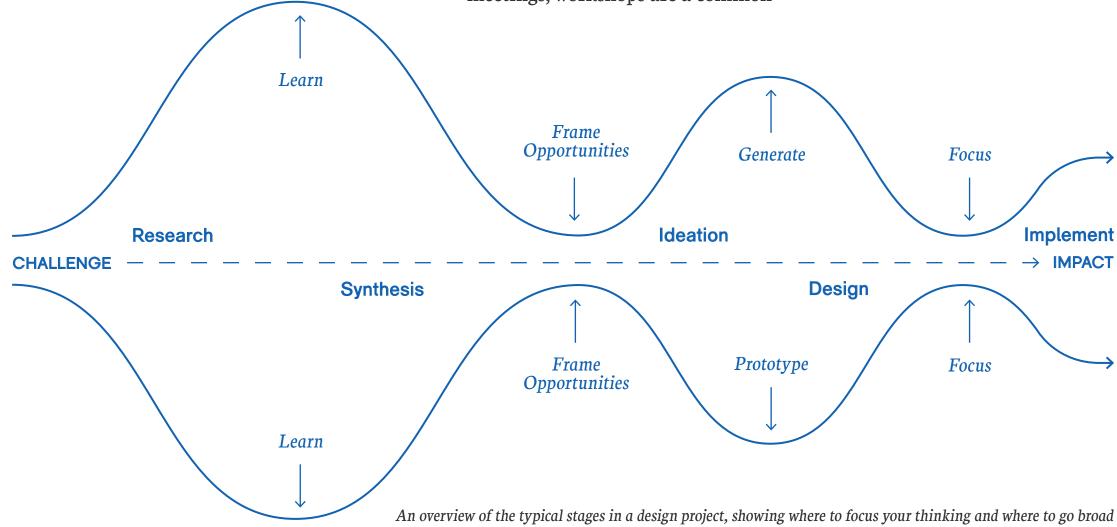
Considering your organisation's intent and innovation appetite against current organisational capabilities is crucial to project impact. Whether it is distilling high-level policy, creating citizencentred design briefs, or working from ground-level initiatives rolling up into organisation-wide efforts, the project team needs permission, support and planning to succeed in its mission. How do we break down a challenge that might feel overwhelming into bitesized, discrete chunks?

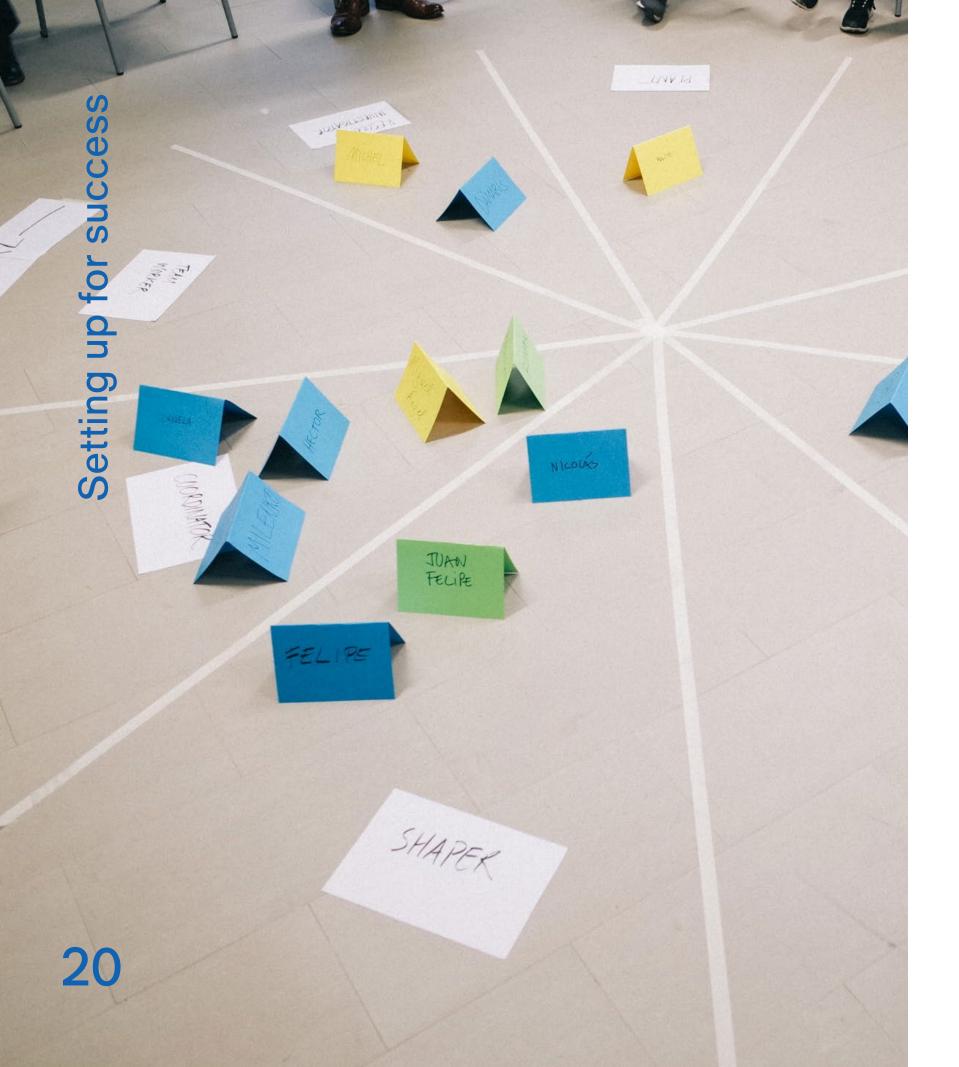
How

Remember that the flow of these types of projects allows for both divergent and convergent thinking, so the template below gives a sense of what a project plan may start to look like.

Instead of lots of traditional-style meetings, workshops are a common

feature of the design process. This format provides the opportunity to work more collaboratively and dynamically, and will help to push your project forwards (see page 23 for more, or click here for the 'planning your project' worksheet).





Assembling your team

Build a collaborative team consisting of the most optimistic, forward-looking and empathic individuals. Make sure the right people with the right skills or knowledge are engaged across phases and milestones.

The challenge brief should be compelling and aligned enough with your organisation's strategic focus so that it encourages and incentivises staff participation. When it becomes too much of an extracurricular activity over and above current workloads, it is likely to fail. The design process is highly collaborative and requires the continuous stewardship of a strong team that stays together. At the same time, due to its potentially disruptive nature to the current state, other parts of the organisation need to be brought in at different points. How then do we garner the right level of engagement, across the right types of stakeholders, at the right points along the journey? Think carefully about the right time to involve key people – and make sure it's not

too late! Knowing who the decision makers are will be critical to things progressing smoothly.

Design led projects typically work best when the team core team is full time for the duration of the project. We understand that typically civil servants work on multiple projects concurrently and over longer periods of time. All our experience demonstrates that a lot more can be achieved a lot faster with full time teams who can focus on the challenge in hand. We have no evidence that suggests it is more productive for core team members to work on multiple projects at the same time, and in fact we would argue that more time is lost by people continuously bringing themselves up to speed as they dip in and out of a project.

Team roles

Sponsorship

- At leadership, management or business unit level
- Invested in the success of the project and its impact on the organisation
- Gives permission, energy and emotional support to the core team, and the people they appoint
- Attends key workshops and project checkpoints to align direction

Project Lead

- Brings content knowledge and stays connected around the organisation
- In charge of steering the project forward and increasing its success
- Empathic, 'people'-person who is optimistic, resourceful and doesn't give up easily
- Often supported by a team member to coordinate schedules, communication and logistics



Core Team: Actively involved

What they do:

The core team are the soul of the project and its chief designers.

They also own the project plan and ensure it stays on track. The Project Lead manages the core team and liaises with the extended and leadership teams.

Key project roles:

The team accountable for the outputs of the project.

Owners of the design process.

When bringing in collaborators, the facilitators of the conversations and input.



Extended Team: Engaged

What they do:

These are typically people identified as subject matter experts, and could come from the policy space and/or delivery space. They contribute their expertise to the challenge.

Key project roles:

Providing subject matter expertise.

Can also act as reviewers of the core team's work.



Leadership Team: Informed

What they do:

The leadership team are the final decision makers, but they should be kept informed along the course of the project and able to contribute their thinking. They are invested in the outcome and support the work of the team across the organisation.

Key project roles:

Decision-making and air cover for the core team.

Setting up your foundations

Form a space and rhythm that works by setting up a shared project space and working calendar.

Design projects need a home to enable rapid idea generation and to inspire behaviours that are creative, open, playful and non-judgmental. Setting up the environment has a huge impact on developing rapport between team members, setting expectations and establishing norms for working together. For more guidance, please use the 'Creative workshop template' found here.

Steps

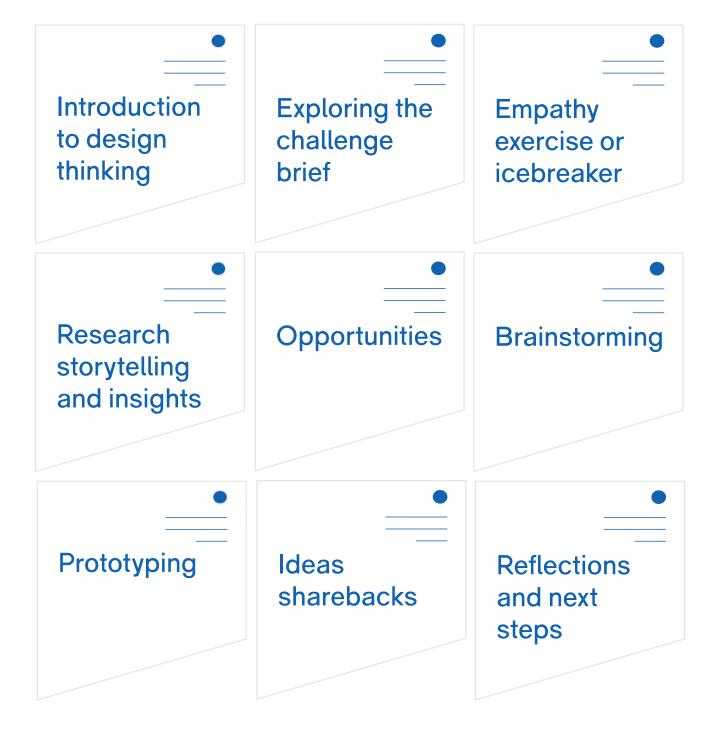
- of Find an area you can dedicate to your project. Ideally it should have plenty of wall space and room to invite others in to engage with your activity.
- O2 Visually map out your project using Post-its and make critical milestones clear for others to see. You may even consider printing out a large project calendar and make it a fixture in your workspace.
- O3 Host a kick-off meeting at the beginning of your project, asking core team members to share thoughts about themselves, the project and the team.

Kickoff agenda

- Review the project brief and envision the impact outcomes together.
- Define what you think success looks like for yourself, the team and the organisation/ country.
- Discuss team members strengths, and how team members can support each other.
- Share hopes, fears, and expectations.
- Understand work-life balance needs and who can be the team champion.
- Define the areas of learning and experimentation to push.

Sample agendas

Customise the agenda based on whether you're organising a kick-off, research storytelling, co-creation or visioning workshop session.



Running workshops

Design led projects are typically meeting light and workshop heavy. Workshops are about bringing people together, getting productive and moving the project along.

There are different types of workshops associated with design thinking projects, and the sample agendas on the opposite page list these out. Each workshop has a specific purpose that helps to move teams through the design process.

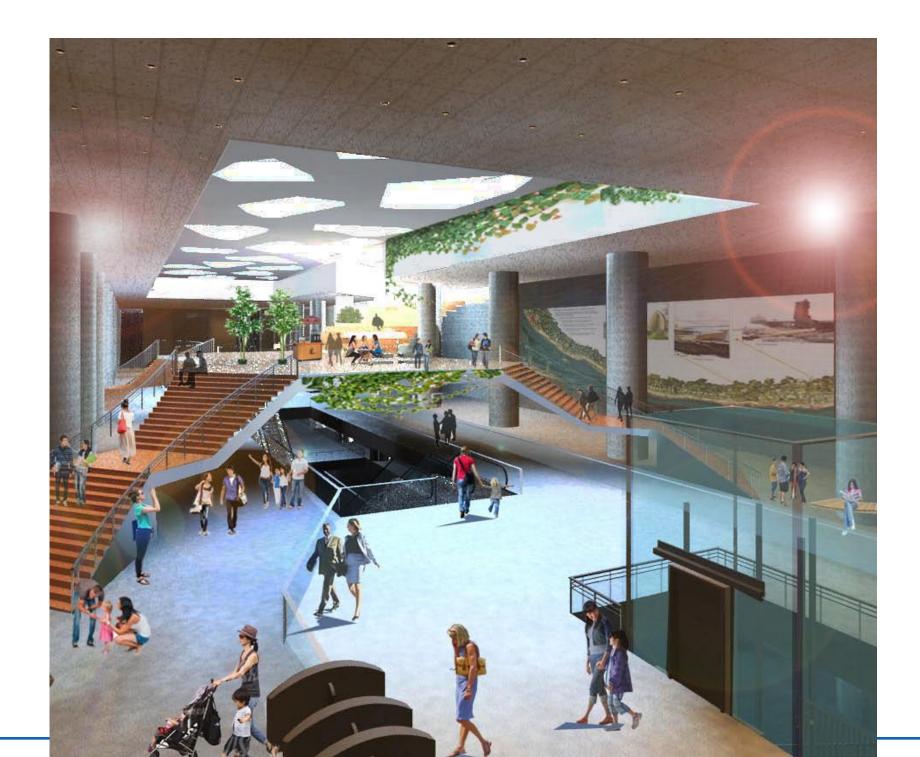
No matter the purpose of the workshop, there are behaviours common to all. Workshops are not about stakeholder management;

they are about people coming together to collaborate, all contributing in equal measure. If your workshop is successful, you should feel that you have significantly moved your project forward.

You can expect several formal meetings along the way with your leadership team too, where you will be more in presentation mode.

Case study, Singapore

Land Transport Authority



Singapore will be doubling its rail network over the next 15 years and opening over 100 new stations. With this in mind, the engineering team responsible for designing the stations had been wanting to take a different approach by thinking about how they could design for commuter needs. Previously stations had been designed with technical constraints as a starting point: what's the available land size? What number of fire exits are required? So instead they asked a different question: how would you start to imagine a future differently, using design? And they came to a different landing point, that the community needed to express itself through the

"So instead they asked a different question: how would you start to imagine a future differently, using design?"

stations. The stations needed to have the right facilities to respond to community needs — childcare centres, bike parking, spaces for community collaboration and more. The process of exploring this has led to several key design archetypes for future stations that include these facilities and that will now guide their detailed design process.

02 — Getting inspired



Key activities

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p.37 — Case study: Creative Councils, Havering Council, UK

Introduction

Once your project plan is set up and you have brought the right people together, it's time to get going.

The first stage is about exploring your challenge further, considering what you already know, and what else you may need to discover.

You will now begin to dig deeper, and by delving into the detail and immersing yourself in the context you can uncover insights and see the challenge from new perspectives.

You can draw upon traditional research techniques to probe further as well as trying some new tools and methods. Your department or organisation will typically have an array of useful sources of information to hand; benchmarking reports, trend reports, outputs from scenario planning and quantitative research on their own services. This is all greatly useful information.

But if you want to innovate in a policy or service in a way that really resonates with citizens, you need to get closer to them.

Spending time with citizens
and service users to deeply
understand how they interact with
products and services is a way
to inspire new thinking. This is
qualitative research, and should be
supplementary to commissioning
or reviewing quantitative research
– not instead of.

Qualitative research methods are heavily inspired by the social and behavioural sciences, and they have long been core methods in the design industry to inspire new solutions.

This chapter covers a number of the most commonly used qualitative research methods. It also takes you through a number of methods that are invaluable for sparking inspiration, such as opening up a problem, visualising challenges and learning from other contexts.



Kickstarting your research

Consider how best to get closer to people, and what you want to learn from them.

The key to getting the right insights during your research activity is asking the right questions. You'll need to work with your team to collectively decide on the themes and issues that you think are most important to your project.

Steps

- Organise a team brainstorm.

 Explore the knowledge gaps you have around your challenge and consider how you might cluster them into themes.
- O2 For each theme, discuss key questions such as: what do we think we know, not know, and need to know?
- 03 Ensure you consider different types of citizen profiles.

 Try to think about the extremes as well as the norms. It's important to include rich perspectives and human stories.
- O4 Think about what research methods might help you get closer to the gaps in your knowledge.
- O5 Explore within your group who has any skills that may be useful, and where else you may go to get support from within your organisation.

Getting inspired 28

Influencing forces

Investigate your challenge further and uncover areas for research by exploring the different forces that might influence it.

Finding answers to complex issues isn't simple, so it's important to try and begin to understand all the different causes and relationships that influence a problem. Many of the challenges we're trying to solve have lots of causes and effects, and understanding these forces is vital to then finding effective ways to address them. Delving into your challenge will also help you identify areas that you might want to do further research in.

Using brainstorming techniques, start with the obvious causes but be quick to move on to the ones that you are less familiar with. Use the knowledge of the group to fill in the gaps and work together on painting a bigger picture.

Steps

- Of the by collectively identifying the core problem you want to unpack.
- Using Post-its, discuss and write down what you think the different symptoms are

 including direct symptoms and less obvious symptoms
 as well as any confounding factors that might influence the problem.
- o3 Next, go through your symptoms and map out all the possible causes again thinking about both direct and underlying causes, as well as other confounding factors.
- Once you've completed this, reflect on both the symptoms and causes and discuss what insights you can take from the process. Repeat the process for any other problems you want to explore.

Definitions

Quantitative research

Formal, objective, systematic process in which numerical data are used to obtain information about the world.

Qualitative research

Primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions and motivations. It provides insights into the problem or helps to develop ideas or hypotheses. The terms qualitative research and ethnographic research are often used interchangeably. In reality, ethnographic research is a subset of qualitative research.

Ethnographic research

Ethnography, simply stated, is the study of people in their own environment through the use of methods such as participant observation and face-to-face interviewing.

Qualitative research

Numerical data is great for informing you on what is going on in your challenge area, but make sure to combine it with qualitative research.

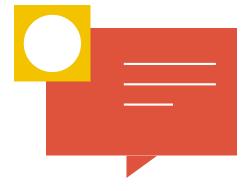
Quantitative research can start to point to solution ideas, and you should review all research you already have. But central to design thinking is also qualitative research tools and methods.

Qualitative research enables you to get closer to citizens, establish root causes to problems from their perspective, and inspire new solutions. Design teams include

both kinds of research in projects.

There are many qualitative research tools and methods, but here we focus on three:

- User interviews
- Observations
- Analogous research



User interviews

These are typically face-toface interviews with citizens that can be carried out oneon-one or conducted as group interviews.

Governments are increasingly aspiring to become more citizen centred, and user interviews are a great method to do just that. If you only use quantitative data, there is a danger of making assumptions about the nature of the challenge. Digging deeper by spending time with citizens enables you to either reinforce your assumptions or challenge them.

If you haven't done an interview before the prospect can be daunting. But people like to share, and you may be positively surprised by just how much! If you approach the activity in an open and transparent way, and are clear about your objectives, then you will be able to unlock invaluable insights. Ask questions in a non-threatening and curious manner.

Listen carefully and don't dismiss their insights. You will learn much more than if you were just doing desk research. For futher support, click here for the 'User interview discussion guide'.

Consider who you approach carefully and strive to go to where people live, work and play to trigger discussions about behaviours, mindsets and lifestyle values. If you do a group interview, allow everyone to be involved equally and listen to all perspectives. It might feel like a focus group, but the purpose is different. Whereas focus groups are typically used to gauge citizen reactions to a new service or campaign once they have been designed, user interviews are used to enquire about the challenge and to gauge opinions, beliefs and feelings to then inspire a new range of solutions. Managed well, user interviews can be fun and productive experiences for everyone involved.



Recruiting interview participants

Always recruit a range of participants for interviews. Conduct 60-90 minute in-depth interviews at people's homes, offices and everyday contexts.

Stepping into the shoes of citizens and frontline staff on the ground is crucial to developing empathy for the end-user experience of a system. It needs team input and scheduling in advance so that you can stay focused during your time in the field - it is as tiring as it is inspiring! Prioritise quality over quantity. Having the right balance of demographic representation is important, but not as important as the right mix of behaviours. (For example, think about how a 70-year-old can have behaviours in common with a 20-year-old, regardless of gender or race).

Types

Usually, you'll look to recruit participants with different perespetives.

- Look in: people who represent internal perspectives from frontline to operations, management and ecosystem stakeholders
- Look out: citizens, customers and users of the system, product or service
- Seek out extreme users and experts: people who have interesting ways of using the system because they represent specific need sets.

Ideally, start recruiting participants through formal and informal networks one to two weeks before the research phase begins.



Creating interview discussion guides

Preparation is everything and creating a discussion guide can make or break the value of the interview. It is about designing for a dialogue, not a survey.

Planning discussion guides helps to impose order on your conversation and prevent discussions from straying too far from research needs. Planning together as a group also helps your team to generate consensus around the purpose of the research. If you are doing multiple interviews, a discussion guide helps keep the responses you get back consistent.

Steps

- O1 As a team, generate interview questions and exercises to ask your users and cluster them into topic areas to allow a comfortable flow (e.g. three umbrella topics of around 30 minutes each).
- O2 Ensure that the questions are open and non-leading. They shouldn't presuppose an answer.
- O3 Rephrase binary 'yes/no' questions to 'why', 'how', and 'tell me about a story when...'.
- O4 Start with warming up, gettingto-know you type questions.
 Do a final review of the guide
 to check you have a wellrounded approach to eliciting
 experiences, struggles and
 aspirations.
- O5 Rehearse with a colleague to help you experiment with going 'off-book' and maintaining a natural, casual flow.



Tips on user interviews

Choose your interviewers

If you don't feel comfortable doing interviews alone, then consider how many people you need. Too many can overwhelm the interviewee and create an imbalance.

Two works well, one to do the questioning and one to capture insights, but definitely no more than three.

Observe body language

What you hear is only one data point. Be sure to observe context and body language.

Give everyone a role

Give everyone a role (i.e. interviewer, note-taker, photographer or concept tester) and agree how you are going to run the session in advance.

Ask why

Ask why. Never judge, correct or speak on an interviewee's behalf. Be a 'guest in their reality'.

Prepare a discussion guide

Bring along your prepared discussion guide (see page 32). Start broad, warm up and then go deep. Where appropriate encourage them to use specific and tangible examples rather than general statements.

Reassure them of their privacy

Always reassure them that you won't share the content with anyone without their agreement.

Capture great quotes

Capture verbatim quotes, instead of recording your impressions. If you are relying on a translator, ask them for direct quotes not just the gist.

Get visual

A picture paints a thousand words. Whether a quick sketch, graph or timeline, getting visual helps to bridge cultural or language barriers and establishes a record of research. Drawing also helps spark ideas in a different way from talking.

Case study, UK

Get up and Grow, Mind



Through its network of over 140 local charities, Mind provides mental health services across England and Wales. A significant proportion of its work is on behalf of the National Health Service and local authorities, which have been under growing financial pressure in the last few years. In order to try to find new answers to these changes, in 2013 Mind began looking into design-led approaches and set up a Service Design programme. It piloted the programme with five local Minds, including Suffolk Mind, who were struggling to make the most of an allotment project that had been established by a small group of volunteers. Suffolk Mind realised they needed to expand their knowledge of what services users wanted and needed from their allotment

"Suffolk Mind realised they needed to expand their knowledge of what services users wanted and needed from their allotment project."

project. They conducted in-depth interviews with six people to understand what day-to-day life looks like for someone living with mental ill-health and how ecotherapy might be of benefit. The team drew a storyboard to help communicate their new ideas. The fun, visual format helped them to engage more people in their plans and get more feedback to shape the offer. The ecotherapy project, now known as Get up and Grow, has since expanded to five fully-funded allotments.



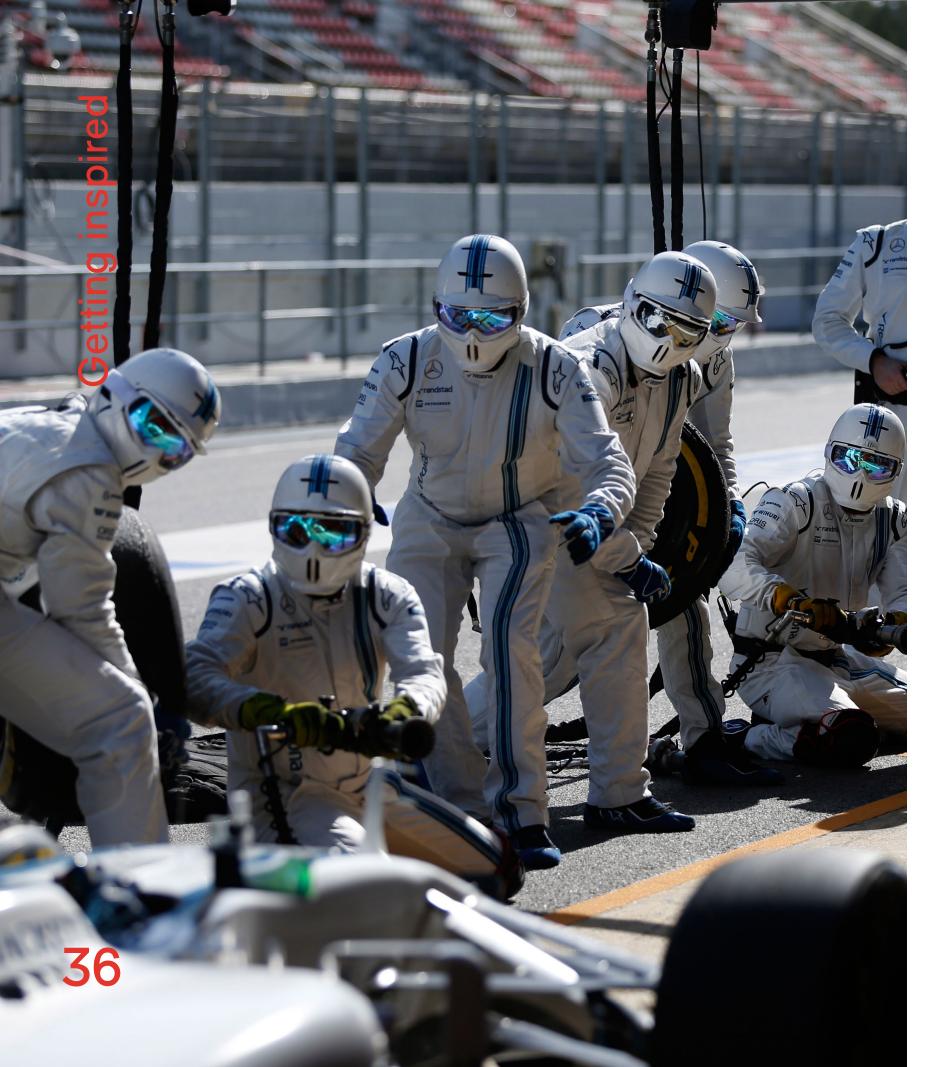
Observations

Behaviours show what people can't always articulate. Embed yourself in the experience of your users through 'fly-on-the-wall' observation to complement interviews.

Finding ways to stand in the shoes of the user is key to challenging assumptions and gaining insight into people's pain points and unmet needs. People don't always do, think or feel what they say — and often at times, aren't even sure of what they really want. Observational techniques can be applied in lots of different scenarios to unlock new insights, and the findings are often more authentic and signpost the actual values, habits and preferences of users.

Steps

- Observe actions and interactions keeping your subject in mind, not yourself or the organisation.
- O2 Ask yourself what is being done, how it is being done, and why. Look for and capture patterns, workarounds, repetitions and what's missing.
- O3 At the end of an observation, ask to take a guided tour through the home, workplace or operating environment of the user.
- O4 This 'show and tell' reveals new talking points, helps you probe deeper and discover what's important.
- Capture information responsibly only take photos or videos of faces and belongings on agreement.



Analogous research

To get a fresh perspective on your research, shift your focus to a new context through analogous inspiration. This helps reframe the challenge to find openings for solving it.

Breakthrough innovation comes by looking at the current state through new lenses. Challenges can be unlocked by isolating elements of an experience, product, service or interaction and then simply drawing parallels with where others have solved similar problems before. Rather than approaching the process in an overly cerebral manner, getting out from behind our desks into new situations helps draw upon our natural reserves to spur fresh thinking. Creative stimulus and 'aha' moments often happen in unexpected places. Analogous research creates ways for teams to facilitate the chances of that happening through open, reflective absorption.

Steps

- O1 List the activities, behaviours, and emotions you might be researching.
- Next to each, write a situation where you might observe these happening. For example, if the activity is "use a device at the same time every day," parallel situations might be how people use alarm clocks.
- O3 Have teams vote on what they would like to observe or take a closer look at.
- O4 When there, pay close attention, stay curious, ask questions and share notes.
- O5 Reflect and synthesise as a team to map back thoughts to your challenge area.

Staff from University Hospital of Wales' neonatal unit worked with the Williams Formula 1 pit stop team to see what speed techniques they could adapt to improve their resuscitation process for newborn babies.

Case study, UK

Creative Councils, Havering Council

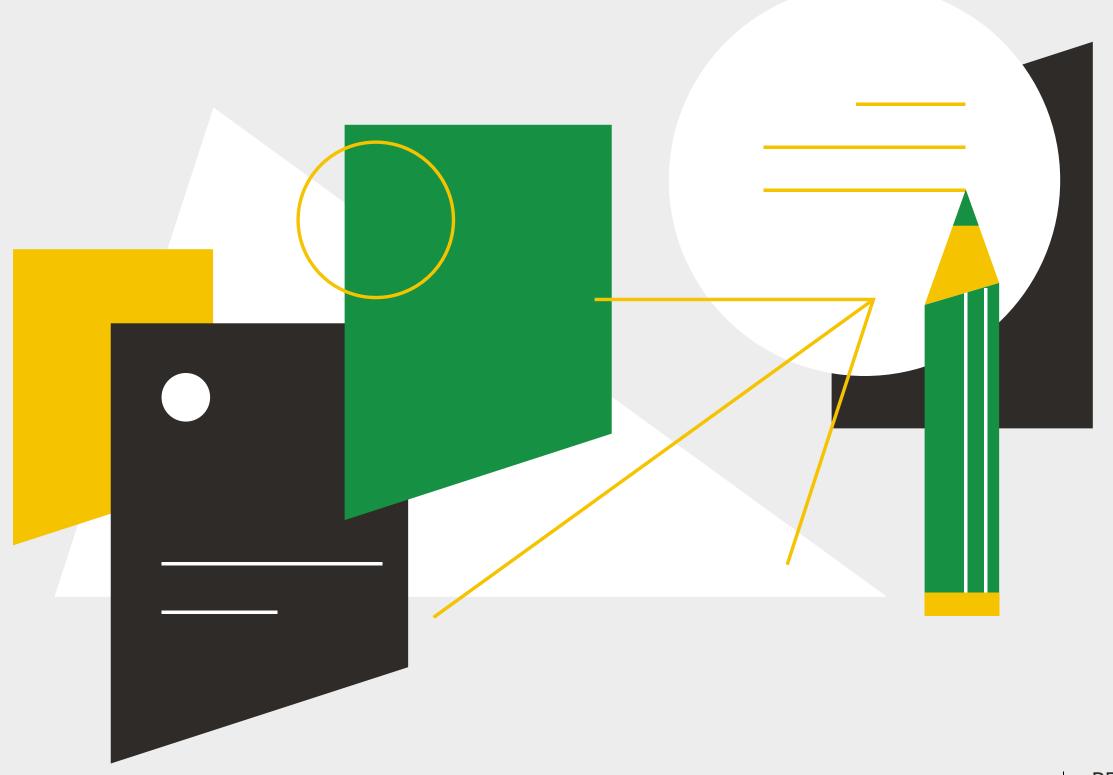


The London Borough of Havering was facing challenging issues around its foster care services. Children were frequently moved from placement to placement, with high levels of instability amongst their carers, and this was leading to disruption and poorer outcomes. To understand the issues better, as part of Nesta's Creative Councils programme the council carried out ethnographic research to get a better understanding of the fostering system from the perspectives of both the young people and carers. By putting themselves in the shoes of the teenagers, they saw how it was easy for them to game the system, and they saw the frustrations the foster carers felt that led them to treat fostering as just a kind of job.

"The research challenged their assumptions and allowed them to draw out insights that would otherwise be missed."

The research challenged their assumptions and allowed them to draw out insights that would otherwise be missed by 'tick box' approaches or traditional research techniques. By using the real words and voices of people, the research created a really powerful emotional anchor for innovation. Instead of seeing clients as cases to be processed, it brought them to life. It also helped staff in the foster care service to realise that they were part of a wider system that was failing. The impact of the research was that it gave the foster care team the focus and moral purpose to drive through change in their services.

03 — Developing insights & ideas



n 40 —

Identifying insights

Case study: InWithForward,

Burnaby Starter Project,

p.44 —

Canada

Key activities

p. 1 0	р. то
Downloading your learnings	Generating opportunities
p.41 —	p.46 —
Sharing stories	Generating ideas
p.42 —	p.47 —
Creating themes	Creating concepts
n.43 —	p.48 —

n 45 -

Co-creating concepts

Case study: Life Programme,

Participle and Swindon

p.49 —

Council, UK

Introduction

Once you have completed your research, it's time to draw meaning from it all. With quantitative research, the data is normally numbers. With qualitative research, your data takes the form of stories. From here on in, it's about using these to create new opportunities for solutions.

Numerical data feels neat to work with; stories can feel messier to make sense of. Drawing out the value of stories is a disciplined process and you need to allow time to do it well. The stories and views you have gathered during the research should remain at the heart of this stage.

From the stories, you will start to spot patterns and themes in what you are learning. Teams are often surprised by how quickly this can happen; they begin to realise that the core needs of citizens, say around healthcare delivery, are remarkably similar no matter their circumstances.

From these themes, you can start to generate insights. This isn't an exact science, but insights are key to creating ideas that you may not previously have considered. You can then work on developing your ideas into concepts, before sharing them with the people that you've learned from and getting their feedback. There is enormous value in making your ideas more tangible by using visuals when doing this.

The rest of this chapter covers methods for turning your research into the start of new solutions using a step-by-step approach.

ideas Developing insights &

Downloading your learnings

Capture your stories and learnings in a consistent way.

Now that you've got a huge amount of notes, photos, impressions and quotes, it's time to start making sense of them. It's likely that the core team won't attend all the research sessions together, but it is important that everyone hears the learnings from all parts of the research. The first activity is therefore to simply download your stories in a consistent format. The download might consist of photos of the interviewee, a little about who they are and the story points that you found most interesting in the context of your challenge.

It's easier to do story downloads as you go along, throughout the course of the research, rather than waiting until the end. The learnings will be fresher in your mind if you do it as soon as possible after an interview or a day in the field. Don't be afraid to discount some information if you don't think it is valuable to

the challenge. Given this kind of research is more about dialogue than a survey, conversations can sometimes wander off point and therefore not all information you gather will be valuable.

- of Find a place to conduct a download with all team members who attended the particular research session.
- o2 Find wall space or have boards at the ready so that you can capture the learnings and make them tangible.
- One team member leads
 the download, with others
 contributing along the way.
 Share key information such
 as who you met, what you
 saw, and your impressions
 of the experience.
- O4 At the end of each download, you may want to check there is a logical flow to the story as you will be sharing this with the rest of the team.

Sharing stories

Once all the story downloads have been done, it's time to share amongst the team.

This is about everyone in the team either sharing or hearing about the research learnings of others. Some learnings may reinforce assumptions you already have about the challenge, some learnings may challenge what you imagined to be true. Perhaps an assumption you had was simply a symptom of a deeper challenge your citizens are experiencing with your services.

This should feel like a very discursive session, where as a team you are pulling out what you all find most interesting and relevant in terms of the brief. Use the information from the individual downloads and start to collate them.

Don't worry if you are leaving some information behind, it may be interesting but not necessarily important in terms of the challenge you want to solve them.

01 — Capturing

Affix a large piece of paper to the wall so you can capture the most interesting, relevant stories and observations as you story tell.

03 — Organising

Put all the Post-its up on the large sheet of paper, organising them into separate categories for each person your team interviewed and each place your team visited.

02 — Sharing

Using Post-it notes, write down the most compelling stories from the field that you feel are most relevant to the challenge, and then share them with the team. Write large enough so that everyone can read your notes.

04 — Synthesising

At the end of sharing stories, you'll have many sheets lined up on the wall with many Post-it notes. Consider this shared information as a group and pull out the most compelling stories you heard.



Creating themes

As you share your learnings with your team, patterns and themes are likely to emerge. Here's how to spot and make sense of them.

Once you've shared learnings and inspiring stories with your team, you're ready to find themes. Take a good, long look across your interviews, analogous inspiration and other learnings. Have any patterns emerged? Is there a compelling insight you heard again and again? A consistent problem the people you're designing for face? What feels significant? What surprised you? These themes are bound to change, but as you move through the this phase, continue to find themes and sort out what they mean.

- O1 Gather your team around the Post-its from your previous sharing stories session.
- o2 Look for patterns and relationships between your categories and move the Post-its around as you continue grouping. The goal is to identify key themes and then to translate them into opportunities for design.
- O3 Arrange and rearrange the Post-its, discuss, debate and talk through what's emerging. Don't stop until everyone is satisfied that the clusters represent rich opportunities for innovation.
- 04 Identifying these themes will help you create frameworks for developing your ideas.

What's an insight?

It is:

- A gut-felt response that makes you sit up and think
- A revelation
- A new way of interpreting existing information
- "I never thought about it that way before"
- It communicates
 a user's need
 (sometimes
 without them
 even knowing that
 need)
- An opinion-changer

It is not:

- Immediately obvious
- A head-nod that implies you understand but are not surprised
- An observation
- A new piece of information
- "I never knew that"
- It does not exist simply to provoke or prove a point

Identifying insights

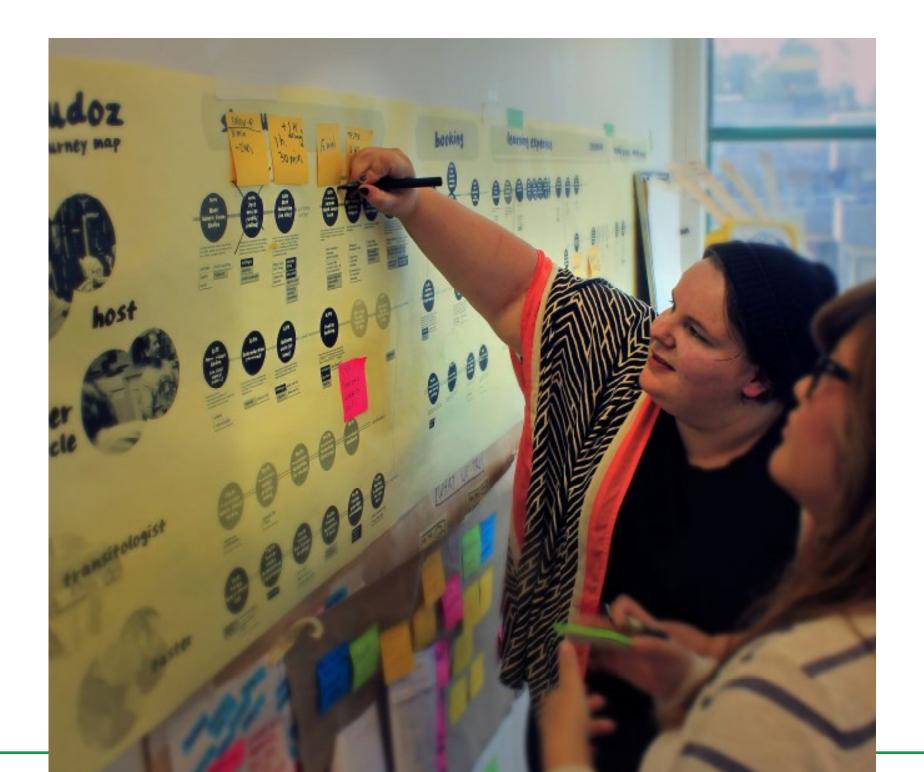
A critical piece of this phase is plucking the insights that will drive your ideas out of the huge body of information you've gathered.

You've heard a lot from many different people, uncovered learnings and identified key themes from your research. The next step in the synthesis process is to create insight statements; succinct sentences that will point the way forward. Insight statements are incredibly valuable as they'll

help you frame "How Might We" questions and give shape and form to subsequent brainstorms. It's not always easy to create them, and it will probably take some work editing them down to the three to five main insights that will help you drive toward solutions.

Case study, Canada

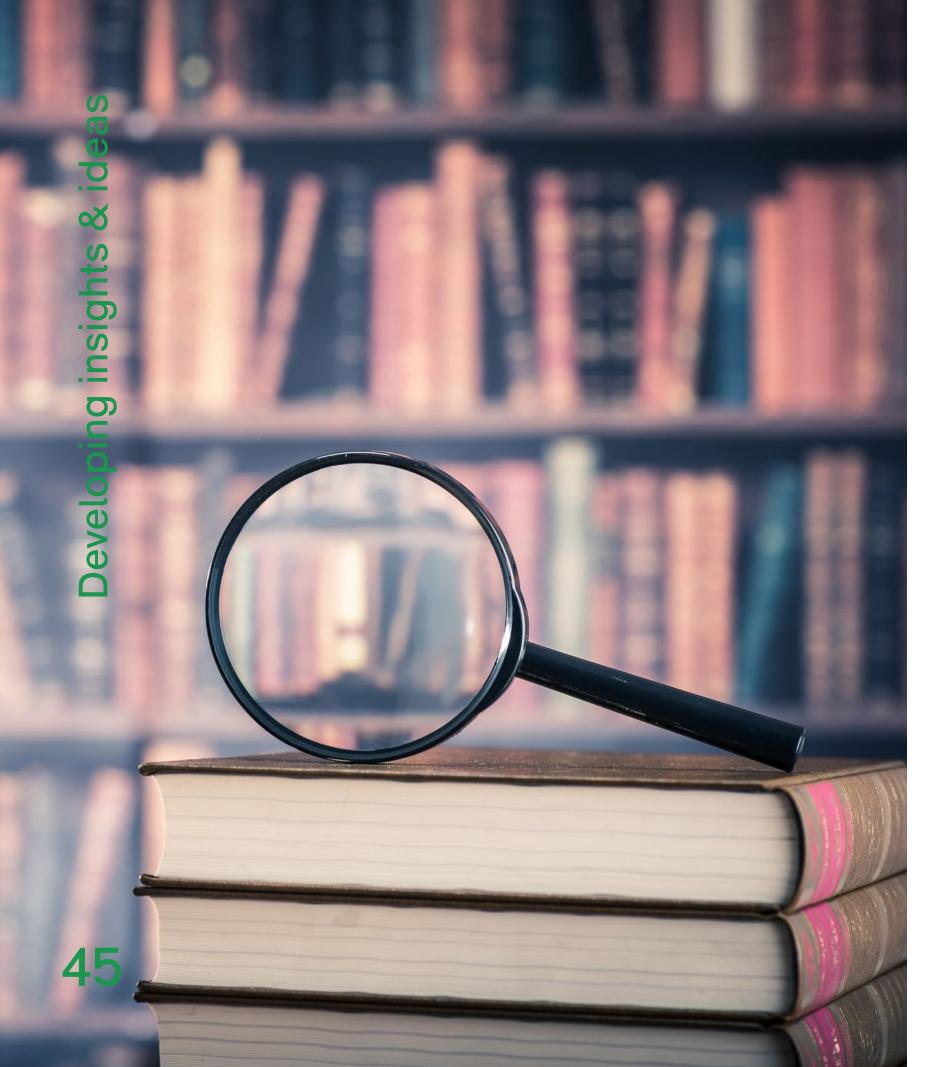
Burnaby Starter Project, InWithForward



How can we support people to not just live in a community, but to flourish as part of that community? Especially people with disabilities, and others, too often left out and disconnected? These are the questions that social innovation practice InWithForward posed when it teamed up with local community living groups in the city of Burnaby, Canada, to come up with new ideas to reduce social isolation. Its team spent 10 weeks doing ethnographic research in a social housing complex, spending time with residents and collecting 50 stories on their everyday life. Through this they observed a pattern; the residents had regular contact with their family, interaction with neighbours and good relationships with care workers. But what they were missing were opportunities to try new things, go to new places or to find new sources of purpose and meaning. This new insight led the team to

"What they were missing were opportunities to try new things, go to new places or to find new sources of purpose and meaning. This new insight led the team to reframe the problem and to shift their focus."

reframe the problem and to shift their focus from social isolation to 'experience poverty' instead, leading to very different ideas about solutions. Since then InWithForward have developed Kudoz, a new type of volunteering programme where local people can host learning experiences for those with cognitive disabilities.



Generating opportunities

Translate your insight statements into opportunities for innovation by reframing them as 'How Might We' questions.

By finding themes and creating insights, you've identified problem areas that pose challenges to the people you're aiming to support. Now, try reframing your insight statements as 'How Might We' questions to turn those challenges into opportunities for innovation. We use the 'How Might We' format because it suggests that a solution is possible, and because it offers you the chance to answer the question in a variety of ways. A properly framed 'How Might We' doesn't suggest a particular solution, but gives you the perfect frame for innovative thinking.

- of Start by looking at the insight statements that you've created.

 Try rephrasing them as questions by adding 'How Might We' at the beginning.
- O2 The goal is to find opportunities for innovation, so if your insights suggest several 'How Might We' questions, that's great.
- Now take a look at your 'How Might We' question and ask yourself if it allows for a variety of solutions. If it doesn't, broaden it. Your 'How Might We' should generate a number of possible answers and will become a launchpad for your brainstorms.
- 'How Might We' questions aren't too broad. It's a tricky process but a good 'How Might We' should give you both a narrow enough frame to let you know where to start your brainstorm, but also enough breadth to give you room to explore non-obvious, creative ideas.

Rules of a brainstorm

01 —

Encourage wild ideas

It's the wild ideas that often provide the breakthroughs. It is always easy to bring ideas down to earth later.

02 —

Build on the ideas of others

Think 'and' rather than 'but'.

03 —

One conversation at a time

That way all ideas can be heard and built upon.

04 —

Defer judgement

There are no bad ideas at this point. There is plenty of time to judge later.

05 —

Stay focused on the topic

You get better output if everyone is disciplined.

06 —

Go for quantity

Set an outrageous goal and surpass it.

07 —

Be visual

Try to engage the left and right side of the brain.

Generating ideas

Energise your team and drum up a great amount of new and innovative ideas.

We use brainstorms to tap into a broad body of knowledge and creativity. Over the course of your project, you should do them not only with your own team, but also with partners and the people you're designing for. Refer to the rules of brainstorming for a fruitful brainstorm. The best policy is to promote openness, lots of ideas and creativity over immediate feasibility. Brainstorms work best when the group is positive, optimistic and focused on generating as many ideas as possible.

Creating concepts

Move from a handful of ideas and insights into a fully-fledged concept, one that you'll refine and push forward.

So far you've come up with, shared and even discarded scores of ideas. Now it's time to bundle your ideas and turn them into a concept. A concept is more polished and complete than an idea. It's more sophisticated, something that you'll want to test with the people you're designing for, and it's starting to look like an answer to your challenge. This is the moment where you move from problem to solution and it drives everything that comes next. It may be helpful to use a 'Concept capture 'worksheet when undertaking this activity, which can be found here.

Steps

- O1 Bundle your ideas into groups and themes, and then put them up on the wall on Post-its.
- O2 Now might be a good time to start thinking about frameworks that help you visualise the wider systems related to your challenge, so try to notice where your bundles are pointing.
- O3 Don't worry too much about all the details of your solution now you don't need a finely tuned strategy just yet. The goal is to get a robust, flexible concept that addresses the problem you're trying to solve.
- O4 Keep referring back to your challenge. Are you answering it? Are there elements missing in your solution? What else can you incorporate?
- O5 There will be a bit of trial and error here, and you'll probably create a couple that don't work out. That's fine.

The concept capture sheet

- Give your concept a name
- Brief description of concept
- Who is your target user?
- What is the value to the user?
- What is the value to the organisation?
- Critical partnerships within the organisation?
- Potential partnerships outside the organisation?
- Anticipated barriers/challenges?
- Key factors to success?



Co-creating concepts

The people you're working to create your solution for can tell you plenty, and they can show you more. Here's how to further incorporate them into your design process.

You'll be talking with scores of people throughout your project, and a co-creation workshop is a great way to get feedback on your ideas and bring people deeper into the process. The purpose of a co-creation workshop is to convene a group of people from the community you're serving and then get them to design alongside you. You're not just hearing their voices, you're empowering them to join the team. You can cocreate services, investigate how communities work or understand how to brand your solution.

- The first step is to identify who you want in your co-creation workshop. Perhaps it's a handful of people you've already interviewed or a particular demographic.
- Once you know whom you want, arrange a space, get the necessary supplies (often pens, Post-its, paper, art supplies) and invite them to join.
- Maximise a co-creation
 workshop with conversation
 starters, a brainstorm, role
 playing, rapid prototyping
 (see following section on
 Prototyping) or other activities
 to get your group engaged.
- O4 Capture the feedback your group gives you. The goal isn't just to hear from people, it's to get them on your team. Make sure that you're treating your co-creators as designers, not as interview subjects.

Case study, UK

Life Programme, Participle and Swindon Council

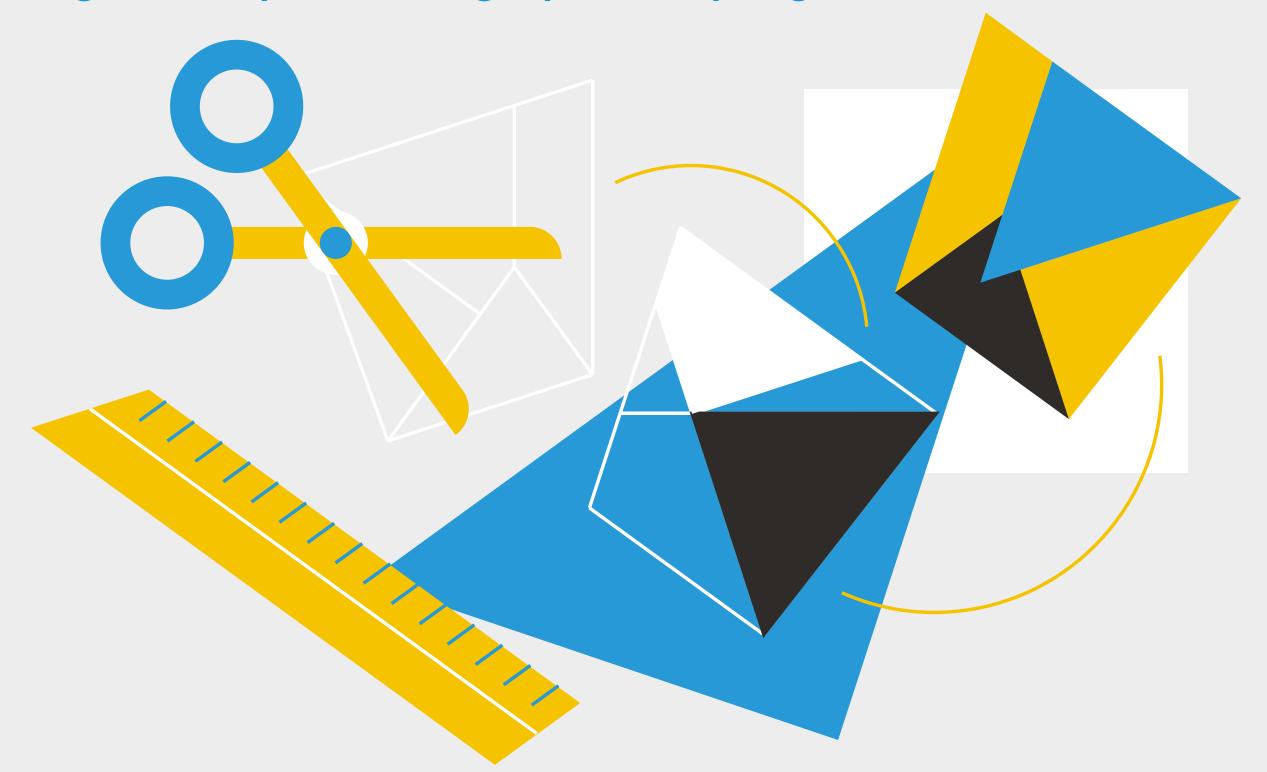


Working with Swindon Council in the UK, social enterprise Participle developed the Life Programme to help stop the cycle of crisis that a small number of families were experiencing. These families were experiencing long-term issues of neglect and deprivation, and were usually involved with several government agencies who had little interaction with each other. After spending eight weeks observing and talking to families and interviewing frontline workers to understand the issues, the team selected four families to help them co-design possible solutions. Both the Participle team

"The family and worker teams then spent time together on both leisure and community activities, building trust."

and family members interviewed frontline workers who wanted to be involved in the programme, and together they built a team. The family and worker teams then spent time together on both leisure and community activities, building trust between the two different sides that had previously often been missing. This in turn created a subtle shift in power, and rather than being given instructions the families were asked to decide how they wanted to use the team's support and what they wanted to change, placing them at the centre of developing their own solutions.

04 — Testing concepts through prototyping



Key activities

p.52 — Getting started	p.61 — Wizard of Oz
p.53 — The difference between the P's	p.62 — Interactive prototype
p.54 — Different levels of prototyping	p.63 — Minimum viable product (MVP)
p.55 — How do you prototype?	p.64 — Randomised control trial (RCT)
p.58 — Paper prototype	p.65 — Case study: Pharmacy redesign, Whittington Hospital, UK
p.59 — Roleplaying	
p.60 — Simulation	p.66 — Case study: Design Thinking for Libraries, Bill & Melinda Gates Foundation and IDEO, USA and Denmark

Introduction

This stage is about taking your concept out for a spin. Ideas on paper can be interesting, but bringing those ideas to life and testing them can be invaluable.

Think of a moment when you have described an idea to a colleague in the past and thought you were on the same page, only to discover later you both had a completely different take on how the idea would play out in reality.

At its most basic level, prototyping is about bringing tangibility to your ideas through developing concepts so you can align on them internally. As you move through the process you then develop your concept more deeply so that you can test it more broadly internally and with citizens. This gives you the opportunity to learn about what works and what doesn't, so that you can adjust and improve your solution before you actually implement it.

There are many different elements that can be prototyped, from a service experience through to a policy. Prototyping doesn't only apply to physical products or software services, so whatever your concept is there will be a prototyping approach that works for you. Prototyping can also be carried out at different levels, and you'll move through different tools and methods as your concept progresses. By the time you have completed the prototyping process, your solution should be at a much more robust stage for planning its implementation

The rest of this chapter describes in more detail the value of prototyping, and then walks through a range of tools you can deploy to test, learn and iterate on your new solutions.

Getting started

Prototyping is the act of making a concept "real" — whether it's a sketch on a napkin or a fully machined piece of equipment.

It shifts our behaviours away from meeting after meeting discussing and debating to thinking more like designers: how would someone hold or interact with this? Should this stand upright or lie on a desk? When someone looks at this, what will the first thing on his/her mind be? How might a child interact with this service?

At the heart of prototyping is risk mitigation. Where there is uncertainty around a new solution, prototyping enables you to remove risk through cycles of testing and iterating on your new solution.

Why prototype?

Develop

Prototyping builds your understanding of what the concept really means. How does it look and feel? How will people interact with it?

Communicate

Prototyping expresses your concept in a tangible form.
Your collaborators will be able to give you more constructive feedback if they can see, touch and feel your concept, instead of just hearing you explain it.

Test

Prototyping brings your concept in front of those whom you are designing for, so that you will yield the most direct feedback and uncover insights.

The difference between the 'P's

Increasingly, you hear the language of both piloting and prototyping in governments.

Pilots are an accepted norm in governments so this section goes deeper on prototyping, which is a newer concept in the public sector.

But first, what's the difference between a pilot and a prototype? Although both are methods for experimenting, our observation is that in the public sector pilots are viewed much more of a 'phase 1' rollout activity than pure experimentation. In a government context, piloting typically happens as a 'live' activity and is often considered the first phase of a policy or service launch. Prototyping happens at different levels. For example, when you are exploring the early stages of a concept, you are likely to develop prototypes behind closed doors. Once you are more confident of what your concept is, but there is still uncertainty around various aspects, you may choose to go 'live' and put it out into the world of real users.

Pilot

- Used when you believe you know the answer
- A pilot is about ironing out the creases
- Ultimately a pilot is measured by success or failure

Focuses on seeding the partially implemented concept to a limited population. Best for:

- Observing behaviours around the actual solution
- Preparing to scale the solution to the entire population

Prototype

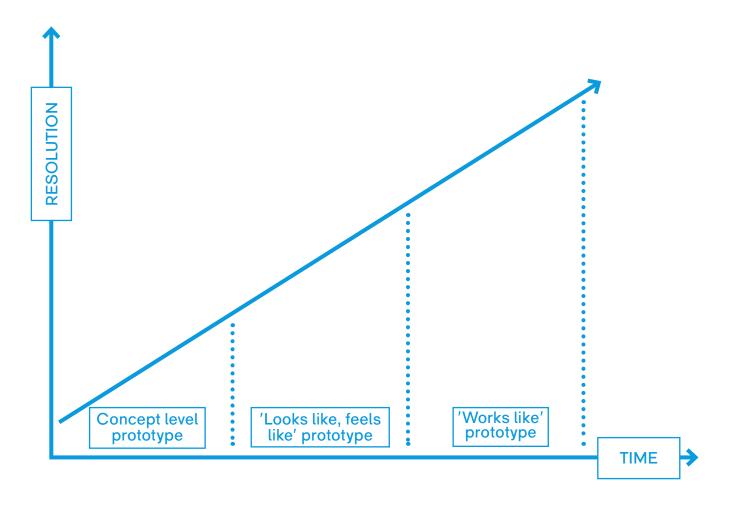
- Used when you have a hypothesis about the answer
- Prototyping is about building towards the right answer
- A prototype is measured by how much you learned and what it informed

Focuses on iterating your concept to maximise learning. Best for:

- Learning if your concept fulfils a need
- Evolving your concept from low-res to hi-res
- Engaging your stakeholders

Different levels of prototyping

Prototyping can be undertaken at different levels of resolution and serve different purposes. The graph below breaks prototyping down into three core levels of resolutions.



What can be prototyped?

Almost anything can be prototyped. What follows is how to go about prototyping and some specific tools to support your activities.

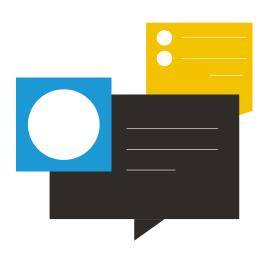
- Citizen experiences
 Organisational structures
- PoliciesSystems
- SoftwareProcesses
- Public offer experiences
 Spaces

When not to prototype

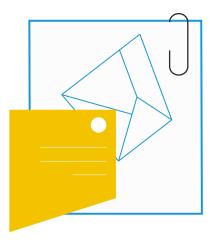
There are times when prototyping is not appropriate. If you have certainty around a concept that is quite incremental in nature, there may be very little risk attached to it. Focus should be placed on implementation in this situation. Tools such as prototyping that are associated with design are still a long way from being fully explored in the public sector. But in spaces like housing, education, healthcare, transportation,

immigration and social services, there is mounting evidence of the value of prototyping in both the policymaking and service delivery spaces. For some policy spaces like foreign policy or defence policy, it's too early to understand how feasible it is to prototype. Finally, timing can be critical. Sometimes, there simply isn't time to prototype and you have to make the decision that you are prepared to run with the risks.

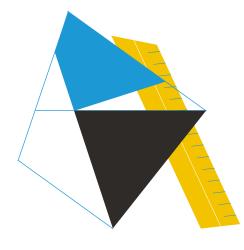
How do you prototype?



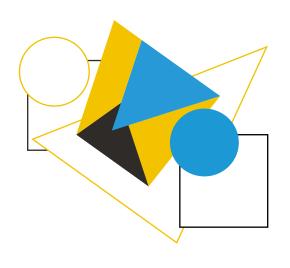
1 Clarify your learning goals



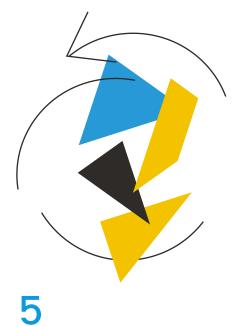
Develop your experiment plan



3Create your prototype



Run your prototype

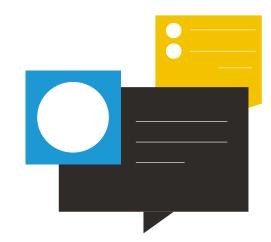


Iterate your prototype

1

Clarify your learning goals

Be clear about why you are prototyping. What assumptions have you made? What do you need to know before you start design?



Questions may be:

Concept level

- Are we all aligned on the idea now we have made it tangible?
- What else can we learn about the idea? What's missing? What potentially needs to change or be built upon?

Looks like/Feels like prototypes

Does the experience we are designing for feel like it effectively fulfils a need that citizens or staff currently have?

- What parts of the solution design are working well, where do we need to iterate?
- What are we learning about feasibility and viability for scale?

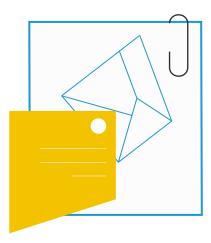
Works like prototype

- Are the outcomes of our solution in line with our aspirations?
- Which of our possible solutions is generating the greatest level of impact with citizens or staff?
- What would it take to make the solution operational at scale in terms of feasibility and viability?

2

Develop your experiment plan

To maximise your learning, you will need to add structure to how you prototype.



Questions may be:

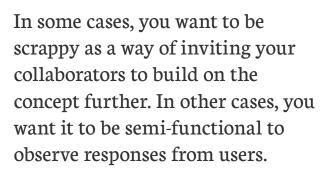
- What prototypes do you want to create to support your learning ambitions?
- What research methods are you going to deploy to capture your learning along the way?
- What environment are you going to test and learn in? Offline in a managed environment where citizens are invited in? Or live in real scenarios, where you track what happens?

- What's the timeframe, budget and resource requirement?
- What's the communication plan that supports the experiment?

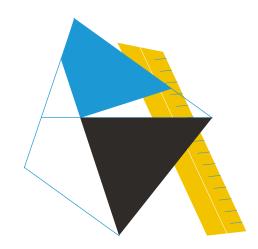
3

Create your prototype

Make the prototype as tangible as you need to in order to talk to your collaborators about it or put it in front of users to gather feedback.



Opposite is a list of potential prototyping tools that you could use. It's not exhaustive but it gives you a starter for ten on commonly used tools. Some tools are more appropriate at particular levels and some work at multiple levels. More detail on how to put these tools into practice begins on page 57.



Concept level

- Roleplaying
- Paper prototype

Looks like/Feels like level

- Roleplaying
- Interactive prototype
- Simulation

Works like level

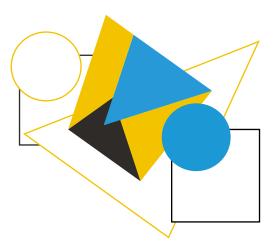
- Minimum viable product (MVP)
- Randomised control trial (RCT)

4

Run your prototype

Make sure you have the logistics sorted

This might include the booking of a physical space, permits, sourcing of uniforms, finding additional staff to manage traffic, or briefing existing staff who might share the same space as the prototype.



5

Iterate your prototype

Gather data to support your learning goals

Based on what you learned, how would you evolve or pivot the concept? Your prototype might fail — this is not a bad thing, because you would have learned why users are not converting to your prototype, or why the feedback is negative. Channel your learnings towards the next iteration of the prototype.



protot Testing concepts through munimum. 58

Paper prototype

Sketch your idea with pen and paper.

If you can draw rectangles, then you can create a Paper prototype. Paper prototyping is a quick way to express your concept. It could be a piece of communications, a sketch of a new service, a web screen or simple wireframe exploring how a user would navigate through a website.

By bringing your idea to life visually, it helps you resolve the key features and understand how people would experience them. It is also a hands-on activity that you can do with stakeholders and users to invite them to co-design with you. Post-its come in handy when you want to communicate any changes. If you are really not keen on drawing, you can also use software tools like Balsamiq.



Roleplaying

Get into character as someone (or even as a piece of equipment) delivering a new experience or stepping through one.

Roleplaying is an immersive activity to help you prototype your idea. You'll learn a lot about the flow within your concept by trying out various roles even just within your office. How will the different roles interact with one another? How will information travel from one role to another?

- O1 Determine the essential roles and who will play them.

 These roles can be customers, frontline and backend staff, or even systems needed to support the experience.
- O2 Use costumes and props to enhance the story, but don't spend too much time making them perfect.
- O3 Improvise your way through the story or pause at important moments to resolve how each role is contributing to the overall experience.



Simulation

Mock up your concepts at scale to invite feedback.

Physically walking someone through your concept, especially if your concept is space or service related, immerses him/her in the experience and invites them to provide specific and constructive feedback to help evolve the concept. Simulation is especially great for engaging your stakeholders to gain their support before you bring your concept out to the real world.

- O1 Determine what you want to design and build depending on your learning goals. What are you uncertain about that you want to learn more about?
- O2 Most often, physically building experiences using basic supplies like foam core and incorporating tools like roleplay is a great way to bring concepts like new service experiences to life.
- O3 Virtual reality (VR) tools are increasingly becoming more accessible so this is also a great way to simulate a potential new experience.



Wizard of Oz

Create the illusion of an automated system without building one.

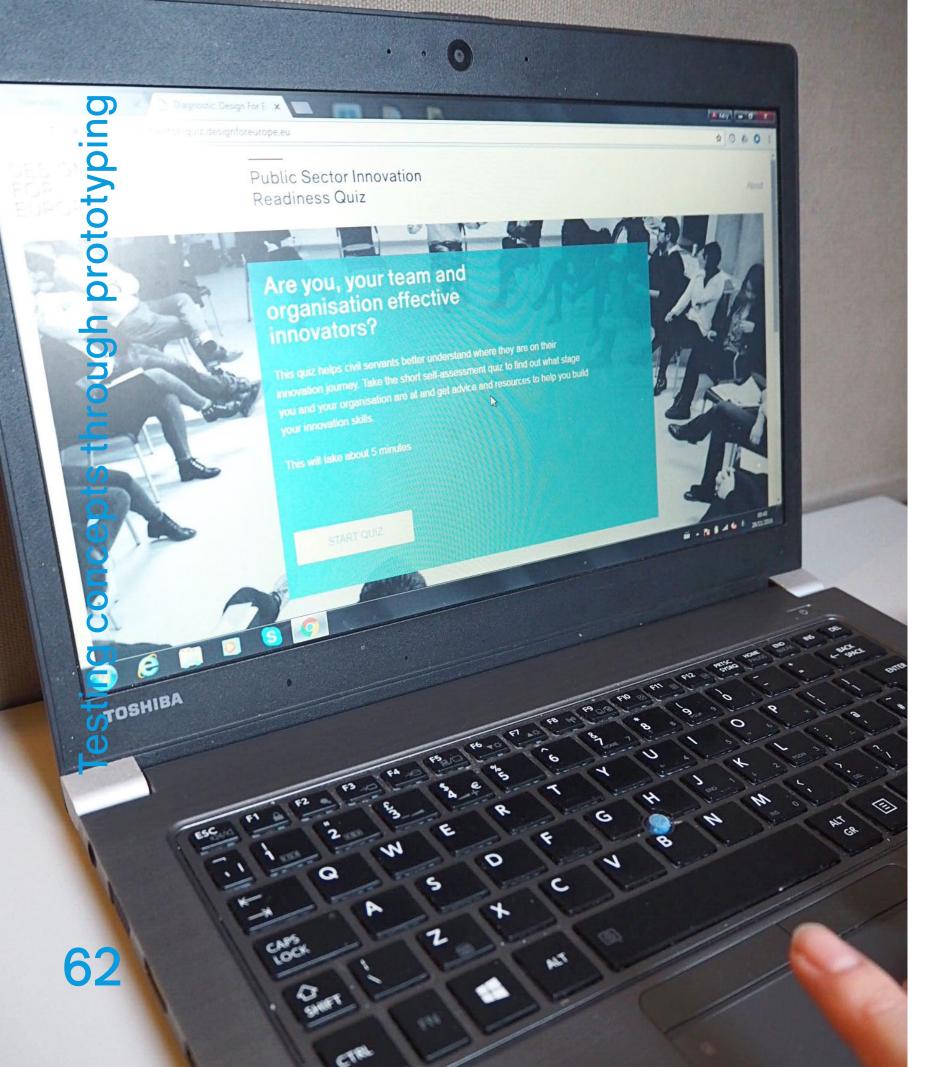
A Wizard of Oz prototype makes people feel that your prototype is the actual solution, without you having to build the real thing.

People will react to your prototype with the most genuine behaviours and emotions, so you can evolve your prototype with more reliable data and you can also be confident that you will see the same responses when your concept is implemented.

- O1 Determine the front-end user interfaces and back-end systems in your concept.
- O2 Use simple tools to build the front-end user interfaces.

 Sometimes, you may develop a simple web app or script a new conversation for existing staff; other times, you may repurpose tools such as Google Forms,

 WhatsApp, IFTTT, MailChimp,
 Facebook or Google AdWords.
- o3 Formulate a strategy to run back-end systems manually. For example, you might "pretend" to be the system when you reply to users via email or SMS.
- O4 Pay no attention to that man behind the curtain! Make sure that people are shielded from the manual back-end operations. You want people to assume some form of automation and efficiency in order for them to give you their most genuine responses.



Interactive prototype

Elevate your paper prototype with clickability.

If you are developing a digital solution, an interactive prototype allows you to communicate how your software concept works without you having to write any code. A great interactive prototype allows people to click through various screens to complete a particular task and understand your concept. Some software tools that help you create interactive prototypes also allow you to host and distribute them so that you can invite a big group of online users to test them and give you feedback.

- Determine what you are going to build based on your learning goals.
- There is no need to move into full software build at this stage. There are some great software tools you can use that cheaply and quickly enable you to build your prototype: POP (Prototype on Paper); Keynote; Axure; Invision; HTML.
- O3 New software tools for prototyping are launching all the time so it's useful to keep in touch with what is going on in the world, and what is new that you can leverage.



Minimum viable product

Test the essential core (and nothing else) of your concept with real users.

If you are trying to learn how people may navigate through an online system or service, then a minimum viable product (MVP) is a simple but realistic way to do so. It allows you to accelerate your learning while using minimum resources by including only the core features of your concept rather than the full solution. This means that you can find out early on what is working for your users and what isn't, and make any adjustments accordingly.

MVPs are often associated with technology, but the logic can be applied across a range of prototyping exercises. It's about using fewer resources and minimal effort to gather insights and obtain feedback on potential changes.

To quote Steve Blank, who popularised this term; "You're selling the vision and delivering the minimum feature set to visionaries, not everyone."

Methods and tools associated with agile development greatly support the ability to design and build an MVP rapidly.

esting concepts through prototyping 19 avr.

Randomised control trial

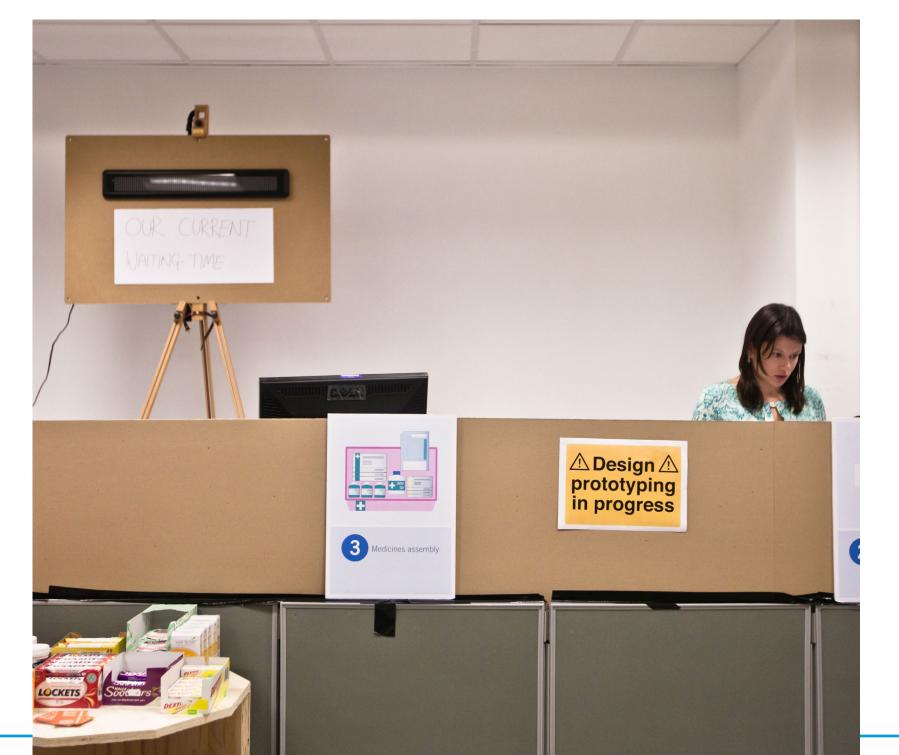
Use a controlled experiment to test whether your solution is working in the way you intended or not.

There have never been guarantees with new policies or services, as the citizen response is not always in line with government intent. Randomised control trials (RCTs) are a good way to test and learn at scale about citizens' actual responses to new solutions before a big roll out. RCTs were previously synonymous with the medical industry, and are used as a way of removing bias during trials. People are chosen at random, and some are given the treatment under investigation, while others are given the standard treatment (or placebo treatment) as a control group. This methodology is increasingly being applied in governments and more commonly in the policy space. Government departments are developing new solutions and using RCTs to test the effectiveness of their solution before rolling out, or indeed testing several different solutions simultaneously to assess the effectiveness of one over another.

- O1 To run an RCT effectively, you'll likely need to partner with experts who have experience in running these types of trials.
- O2 Some interventions lend themselves more readily to RCTs, so you'll need to decide if your solution is suitable. The simpler, more linear and well defined the intervention, the more appealing it is as a subject for an RCT.
- o3 You'll also need to consider what stage your solution is at. If it is at an early stage of development, its delivery methods might not yet be robust enough for an RCT, as they require that the intervention is closely monitored and delivered in a consistent way.
- O4 There are several guides
 out there that can help you
 understand the methodology
 and practicalities of running
 a trial, including Nesta's
 Guide to RCTs in Innovation,
 Entrepreneurship and Growth.

Case study, UK

Pharmacy redesign, Whittington Hospital



Whittington Hospital is one of the UK's busiest, and its inhouse pharmacy knew that collecting a prescription at the hospital was not a pleasant experience for patients. They entered the pharmacy often feeling unwell and anxious — and these feelings were exacerbated by long waiting times and a lack of communication. Previous efforts to improve the situation, such as user questionnaires, had resulted in poor levels of patient participation and provided no clear insights. So the pharmacy partnered with the Design Council, who brought in architectural codesign experts Studio TILT, and service design agency Commonground to help. They decided

"After taking feedback on board, the designers finally tested the new pharmacy layout and process at full scale, which helped to really understand what users needed from the space."

to take a co-design approach and work with patient, staff and management groups to collaboratively create a space. Together, through workshops, they came up with new ways for how the space could work and created cardboard models to try out their ideas. Next, these ideas were tested in the actual pharmacy at half scale. This gave both the workshop attendees and other visitors the opportunity to experience the changes and give feedback. After taking feedback on board, the designers finally tested the new pharmacy layout and process at full scale, which helped to really understand what users needed from the space and what they did and didn't like. As a result, the queue of patients at the registration area has been shortened, prescription tracking has been introduced and new areas for confidential consultations have been created. The work has measurably improved the patient experience, boosting staff morale and increasing sales at the pharmacy.

Case study, USA and Denmark

Design Thinking for Libraries, Bill & Melinda Gates Foundation and IDEO



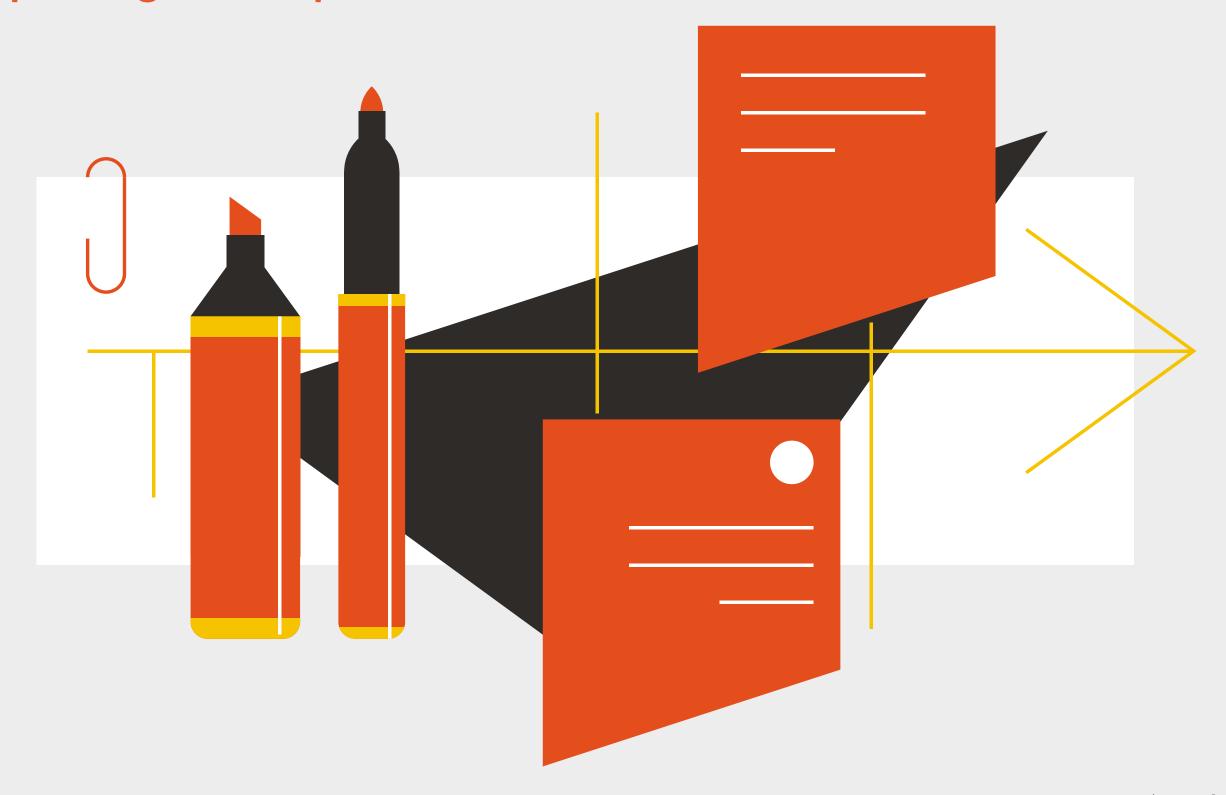
What's the future of libraries? As information goes digital, the role of the brick-and-mortar library has to evolve, too. With a grant from the Bill & Melinda Gates Foundation, Chicago Public Library and Denmark's Aarhus Public Libraries partnered with IDEO to explore this theme. The final result: the Design Thinking Toolkit for Libraries, a collection of reading and workshop material that can be used by any frontline library staffer to adapt to library users' changing needs anywhere in the world. Over the course of six months, library staffers engaged with patrons to test out brave new ideas that change our perception of the typical library. These included an anything-but-quiet teen expression lab with music- and art-making tools, a 'tech spa' for users looking for how-to information, and a series of narrative storytelling workshops for kids that used play as a springboard for learning.

"IDEO helped our staff see how to create rapid change, in service of our patrons, effectively, quickly, and with very few resources."

 Andrea Saenz, First Deputy Commissioner, Chicago Public Library

The 'lessons learned' from these design experiments were then pulled together and synthesised to create the toolkit. Since launching in January 2015, it has been downloaded by over 11,000 librarians in more than 100 countries and has been translated into Romanian, Japanese and Spanish — with more planned in the future. One experiment, a redesigned children's space that encourages play and verbal interaction to speed early learning, recently won a USD 2.5 million grant from Exelon and is being rolled out to 14 Chicago neighborhood libraries.

05 — Preparing for implementation



Key activities

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Creating a pitch

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Capabilities quicksheet

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Staffing your project

p.72 —

Case study: Patchwork, FutureGov, UK

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Creating a roadmap

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Building partnerships

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Measuring and evaluating

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Case study: Family by Family, TACSI, Australia

Introduction

So you have reached the final but perhaps most critical phase of any project. If you've launched services or policies before, you'll know that preparing for implementation can be a challenging task.

But having followed the earlier phases of the design process and involved your key stakeholders, you should feel reasonably comfortable that they are on board to support with implementation. Before you plough on in however, there are a few more things to consider for the transition to be a success. In this chapter we highlight a few more creative decisions you may need to make.

For example, being able to clearly articulate your concept and demonstrate its viability and value is important to get right. This will help win over new supporters who can potentially help you to leverage any further funding or resources needed to get your solution off the ground. You will also need to make sure you have the right people and skills in place. And

perhaps crucially, you will need to plan what you want to measure and be clear about how you intend to demonstrate impact. Getting a measurement and evaluation framework in place early to capture critical insights will allow you to iterate and make changes more easily.

Exactly how quickly you roll out your solution will depend on the sense of certainty around it and how big a change it is. The size and pace of change may be directly related to the level of risk, so be sure to consider mitigating against this before you proceed. You may, for example, want to consider a staggered rollout for radical changes.



Creating a pitch

Now that your plan is pretty much ready to go, you'll want to communicate it to funders, partners, citizens, everyone!

A pitch is a great way to communicate your proposition, how it works, why it counts and who it benefits. You can use your original challenge brief to build from, and in the process of making it you'll clarify the key elements and refine how you talk about them. A pitch is a primary way that you'll present your solution, and you'll be using it to convince different types of people — from stakeholders to senior management — to rally to your cause.

- O1 The first thing you'll want to articulate is the essence of your product, service or experience.

 Offer context, the main thrust of your solution, why it's different, and any call to action you're making. Try to succinctly explain it in less than a minute.
- O2 You'll want your pitch to be clear and unambiguous, so don't get bogged down in details.

 Focus on how and why it counts.
- o3 Next you'll want to get that story into some kind of format. It could be a pamphlet, website, book or presentation. You may need more than one. You may need a graphic designer or writer to help.
- You'll likely communicate differently with different audiences. Make sure you think about telling stories of varying lengths and degrees of detail.

 What are the short, medium and long versions of your pitch?

Capabilities quicksheet

What people skills do you need to make your solution happen? The team you've currently got may not be enough, so consider what gaps you may have.

Devising an innovative solution and putting it into practice are two different propositions. This tool will help you understand the feasibility of your solution and help you understand where your or your organisation will have to seek help. It makes sense to do this exercise in conjunction with Staff Your Project and Roadmap. Taken as a whole, these three methods will help point you toward the practical implementation of your work. For futher support with this activity, use the 'Capabilities quicksheet' found here.

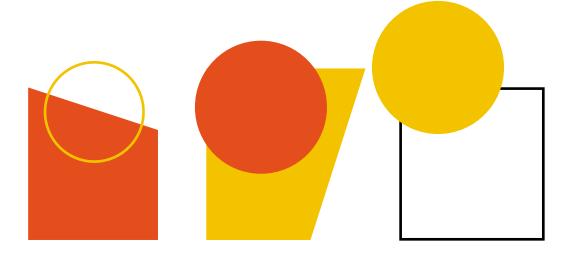
- O1 The main elements that you'll want to understand are the distribution of your solution, the partners you might need and the capabilities necessary to execute.
- "Capabilities," and "Partners" on big sheets of paper. Have a brainstorm about what needs to happen for each category. List what you've already got and what you'll need. For example, under "Distribution", perhaps you need to source, store and distribute a product. Many smaller steps within each of these large categories should emerge.
- Start to group needs based on actors in the room, and then include a category for needs that are out of the scope of the team. Will you have to form new relationships or can you leverage existing ones?
- O4 Look at how you plan to "Staff your project" (page 71). Do you need more or less help after assessing your capabilities? Now move onto "Creating a roadmap" (page 73).

Staffing your project

Now that you've got an idea to put in motion, build the team that can take you from concept to completion.

The methodology here is pretty similar to when you built a team in the Setting up for Success phase, only this time you'll want to be far more targeted and connect with different people. Whereas a multi-disciplinary team was great for arriving at unexpected ideas and novel solutions, in preparing for implementation you should also be targeting specialised skills and technical abilities that may go beyond your known partners or funding streams. Now might be a good time for some team members to move on from the project and for others to join.

- O1 Now that you're most of the way through your project, determine who are the most essential members of your team for implementation. Make a list of the critical skills that are required, then reorder the list based on highest priority.
- O2 Take a look at your existing team.
 Do you need specialist skills?
 Perhaps a designer, someone with specific expertise, or particular sector knowledge? Do you need dedicated project management resource?
- O3 Are there organisations that you now need to partner with? What about funders? Will you have to get buy-in from managers or officials?
- O4 Implementation can take a long time, so think down the road about who you'll need now and who you'll need when you've launched.



Case study, UK

Patchwork, Futuregov



In response to a series of child care failures in the UK, design agency FutureGov came up with the idea of a social network for public services. Having identified a lack of shared, coordinated communication between government agencies as a key issue, the team brought together children's and social services, teachers, police, health workers, technologists, designers and funders to discuss what could be done. They then built a prototype for a service called Patchwork — a secure web tool that connects professionals from different organisations and allows them to access the contact details of others working with their clients.

"Design research was fundamental to articulating the problem accurately, and the involvement of those at the sharp end of social care was invaluable."

FutureGov spent six months building and testing with Staffordshire County Council. The result was a minimum viable product which could then be tested and scaled with wider practitioners. Design research was fundamental to articulating the problem accurately, and the involvement of those at the sharp end of social care was invaluable. Involving for example, police and social workers during the UX design phase, really helped them understand what functionality was essential and what might simply get in their way. Following a pilot of the project in Staffordshire, FutureGov expanded the process, going on to develop the live version of Patchwork with backing from Brighton and Surrey local authorities. Today 1,894 professionals across the UK and Australia are currently supporting 5,375 clients through Patchwork, enabling a higher quality of care.

Creating a roadmap

You'll need a timeline and a plan of action to get your solution out into the world. Keep on track with a roadmap.

You've got a concept you feel excited about and you've tested it in the world. Now you need to create a plan for how you're going to implement it. A roadmap helps you gather the key stakeholders in your project and collectively figure out a timeline, who is responsible for which elements of the project, and establishes key milestones. Rely on the work from your "Capabilities quicksheet" and "Staff your project" tools to give you a full picture of how to build your roadmap.

Steps

- O1 Assemble your team and all the critical stakeholders responsible for implementing your idea.

 They'll have information that you may not know but that is crucial.
- O2 Make it visual. Print out a big calendar for the next year or so to map out what needs to happen when. Start adding Post-its with key dates such as a pilot launch, rollout date, etc.
- 93 Break it down by thinking about your calendar in chunks. Answer questions like "What needs to happen in the next month? In three months? In a year?". Themes will emerge around the various tracks of work that need to take place.

- o4 Think about the major milestones in your project timeline: when will you launch? When will you need to complete your technical development by? When will you kick off a communications plan? Get key dates on the calendar.
- O5 Assign a team member or partner to each track of work and get someone to champion each element of your project.

 Be prepared to hold them accountable to the tasks.



Building partnerships

You may need some help to get your concept out into the world. Building strong partnerships early on can help you get there more smoothly.

As you prepare for implementation, you may realise that you'll need to rely on a variety of partners. These could range from everything from partners for funding to those who'll help you with delivery. The key idea here is identifying the right kind of partners you need.

Steps

- O1 Get your team together with other key stakeholders and partners and run a brainstorm around what partnerships you need. Maybe you need greater access to the press, maybe you need to raise money.
- O2 Next, take those key partnership needs and have another brainstorm around who you know already and who you can reach out to in your wider network.
- Though you'll want to remain flexible, you'll also want to start to set parameters around what you need from your partners. Figure out when you'll need each one, how much you can reasonably ask of them, and what kind of deadlines to set around your ask.

Measuring and evaluating

Your goal has always been to have big impact. Build in ways to measure and evaluate results.

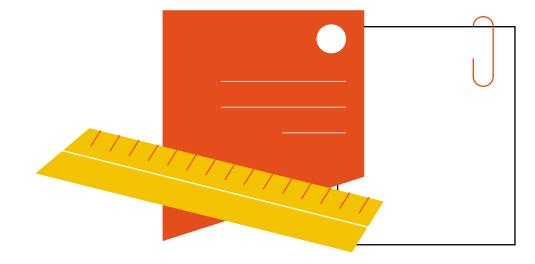
Throughout the design process you are constantly encouraged to learn, evaluate and improve your solution. And now that you're on the verge of getting it out into the world, you'll need a plan to find out if you're having the impact that you want. There are lots of ways to measure and evaluate your solution; the key is to understand what kind of approaches are right for you. Sometimes it's easy, for example if you are responding to a clear impact measure such as saving money then that should be straightforward to demonstrate. But if you're trying to change a community's behaviour or increase the adoption of a service, you may need a more nuanced approach. And in some cases it may take years to really understand the impact of your solution. Here are a few things to think about as you build your strategy.

Steps

- O1 Firstly, determine why you need to measure. Is it to demonstrate impact? To get more funding? To improve business practices?
- O2 Be sure to bring key stakeholders into this conversation. They may have been measuring and evaluating your topic area for years and can provide key insight.
- O3 Assess whether your team is best suited to carry out the process.

 You may need to hire an outside team or consultants to help.
- O4 A common method for assessing impact is an RCT (see page 64). They are highly rigorous, but are also very expensive and can take years. Dynamic measurement tools (like number of visits or sales numbers) may be more useful for you.

- O5 Try to find a balance between quantitative and qualitative measurements. Stories from partner organisations and the people that you're designing for can be very powerful, especially if your solution doesn't lend itself to capturing hard numbers.
- O6 Take a prototyping attitude to your measurement. You can always tweak your operating model based on the information coming in to maximise your impact.



Case study, Australia

Family by Family, TACSI



The Family by Family programme was developed by TACSI (The Australian Centre for Social Innovation) in response to a government brief to reduce the number of families requiring crisis services. TACSI worked with more than 100 families to identify causes of crisis and isolation and potential solutions. They then co-designed a programme where families that have experienced and overcome hardships and grievances are trained and paired with other families who are currently experiencing stress but are eager to make improvements. After a successful three-month prototype, the team started preparing for a wider rollout. They'd trialled new team roles during the prototyping process and so began to look for permanent recruits. They also carried out multiple rounds of blueprinting to plan out precisely what the service processes and touchpoints would be. During the prototyping stage

"During the prototyping stage they had engaged with stakeholders who could then act as advocates for the programme."

they had engaged with stakeholders who could then act as advocates for the programme, and this helped with pitching for funding to government departments, foundations and NGO service providers. Finally, TACSI commissioned an evaluation to take place during the first year to understand the mechanisms of change as well as the programme's effectiveness. This later fed into a cost benefit analysis that enabled them to secure ongoing investment and expansion, and Family by Family now operates in five sites across two states. The latest independent evaluation shows the cost benefit ratio is 11:1, meaning that for every \$1 spent the government saves \$11 (in child protection costs alone).



Common challenges

p.79 —

"We don't know how to define the challenge well."

p.80 —

"We have little experience in running qualitative research with citizens."

p.81 —

"We pilot, we don't have to time to prototype."

p.82 —

"We don't have enough time!"

p.83 —

"We don't connect as a government; policymaking and service delivery don't relate well to each other."

p.84 —

"Our politicians want big announcements and fast implementation."

Introduction

In sharing this collection of practical tools and methods, we have hopefully given you the insight needed to grow in your role and the confidence to bring about change using design.

At the very least, we hope you will be able to influence the direction and/or execution of a new product, service or system that responds to the challenges you and your department are facing. You should by now feel that design thinking is something anyone can roll their sleeves up and get involved in.

Experimentation with design tools and methods can help bridge the gap that often exists between challenge and change. By using them you will also likely feel more connected to the customers and users of your services, and this it turn can bring about a renewed sense of purpose and responsibility in your role.

The adoption of design thinking in governments can often feel disruptive for the agency or team doing so, but incredibly valuable once they have embarked on the journey of change. Initiating this level of change prompts a number of common challenges. On the following pages are a few we hear most often from civil servants, along with some ideas as to how you might address them.

"We don't know how to define the challenge well."

Governments often spend a long time thinking about challenges from their own perspective, which means that civil servants can then struggle to identify with the challenge from a citizen perspective.

If citizens do not form a central part of the initial question, then it is highly likely that your solution will be focused on government rather than citizen outcomes.

Citizens must be placed front of mind right from the outset. Always make sure you include the end user

when setting your challenge brief
— it is a constant reminder of who
you are designing for.

You should also be prepared to change the challenge during the project. You will set an initial one based on what you know at the time. After the 'Getting Inspired' stage, you may learn new information that challenges your assumptions of the nature of the problem. Check in at this stage and consider whether you need to rearticulate the challenge based on what you have learned.



TEAMWORK

"We have little experience in running qualitative research with citizens."

Designing and running constructive qualitative research activities with citizens is a skill. As with all skills, it can be learnt.

Learning the skills and practicing them on live projects will help you become more confident over time. Once these skills have been acquired, it true to say that almost all the civil servants we have worked with have really enjoyed spending more time with citizens.

It re-connects them very personally with the reason why many joined the government in the first place: to contribute positively to the lives of people.

It may be that you don't always have time to run the research yourselves, and there are many research agencies who can support you with this work. However, you should still learn the skills so that you can brief third parties well.

"We pilot, we don't have to time to prototype."

One of the biggest challenges we hear when civil servants want to prototype is around time, or more obviously the lack of it.

Political pressures to launch a new policy, or genuine concerns about the amount of resource required to add in further steps can put a halt to experimentation. Sometimes we hear that public servants are simply expected to know all the answers, so why the need to prototype? Well, if the solution is only incremental with no or little risk, then you can move to implementation quickly.

But to create more ambitious changes, you'll likely need to take bigger leaps and more radical approaches where the outcomes are less predictable. And although the levels of uncertainty might be greater, it may be better to aim

for a bigger goal than to simply walk the same steps as before. Prototyping can help to mitigate risks when outcomes are uncertain, and it can save time on corrective action once a new solution has been launched. By allowing citizens to be a part of the design process, they also become part of your work and more than just the recipient of it.

Governments already have great platforms for prototyping but they are frequently underutilised. For example, many governments hold public consultations as part of their formal regulatory process, but these are often perceived as being more about marketing than making a difference. Instead, opportunities such as these could be a useful place to start taking some different approaches and engaging citizens in prototyping services.





"We don't have enough time!"

All governments seem to be facing a consistent challenge.

The world is changing fast and becoming ever more complex, so the rate of change of policy and subsequently delivery seems to be exponential in its rise. Spending time with citizens and running prototyping upfront can sometimes

feel like a luxury in terms of time. And yet, our observation is that government agencies often spend an enormous amount of time course correcting after launch. It's about changing the rhythm of how you work. Spending more time early in the process saves having to make changes after launch.

"We don't connect as a government; policymaking and service delivery don't relate well to each other."

This appears to be an organisational construct in all governments, and is not the best way to serve citizens in many instances.

Citizens have service experiences. If they are stuck down by illness or an accident then they consider their hospital experience. When they are renewing their passport, they think about their experience in terms of speed of service and performance. So, citizens don't see the divide between policymaking and service delivery; they view services through whether it was a

great experience or not.

Many governments have started to challenge the received wisdom of this internal divide and are bringing policymakers and those who deliver services together to solve problems collaboratively. It's about designing with implementation in mind from the outset.

Governments are not yet making wholesale change, but they are experimenting in certain agencies in the belief they will deliver better citizen outcomes.





"Our politicians want big announcements and fast implementation."

This is a tricky area. In a typical flow, a government generates either a new policy or more often makes changes to an existing one, the service delivery arm figures out how to deliver the new policy to citizens, and then the change is rolled out.

When the change is deemed as low risk, this is typically the right approach. If, however, the change is much more fundamental, the implementation plan requires further consideration. Carrying out prototyping and piloting activities are all great ways to learn, but at some point implementation needs to commence. How you kick off your implementation is a question of the sense of certainty around

the solution. If there is a high level of confidence in the solution and outcome, then a full rollout is appropriate. If you feel there are still uncertainties, you should consider a staggered approach to rollout.

Of course, in reality, other political forces come into play too. However, we are starting to see signs of change in governments. Politicians are starting to see the advantage of going deep in understanding citizen needs, and then generating new solutions and prototyping with them.

Like with all change, some received wisdoms in governments are being challenged through the adoption of design thinking.

If you would like to explore further, please visit:

nesta.org.uk ideo.com designforeurope.eu

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Brief template

— Setting up for success, page 17

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Follow this template to define the challenge you're seeking to address. Complete the different sections on the worksheet to prompt new thinking and bring up new questions, ultimately shaping a stronger direction to move forward in.

		I	
1. The design challenge: How might we	2. Why is this challenge important?	3. Do you already have stated ambitions?	5. What is the project plan?
Set out an optimistic statement regarding what the outcome you hope to achieve is.	How would you describe the problem you are solving or the new opportunity you are looking to leverage, and why does it matter?	If so, what are they?	How will you achieve your goals in a given timeline Refer to the 'Planning your project' worksheet
		4. What research or resources do you already have?	6. Who's involved?
		What have you collected that informs your brief? Think of trends, bespoke research, etc.	Think about the core, extended and leadership team — and what their roles are.

Planning your project

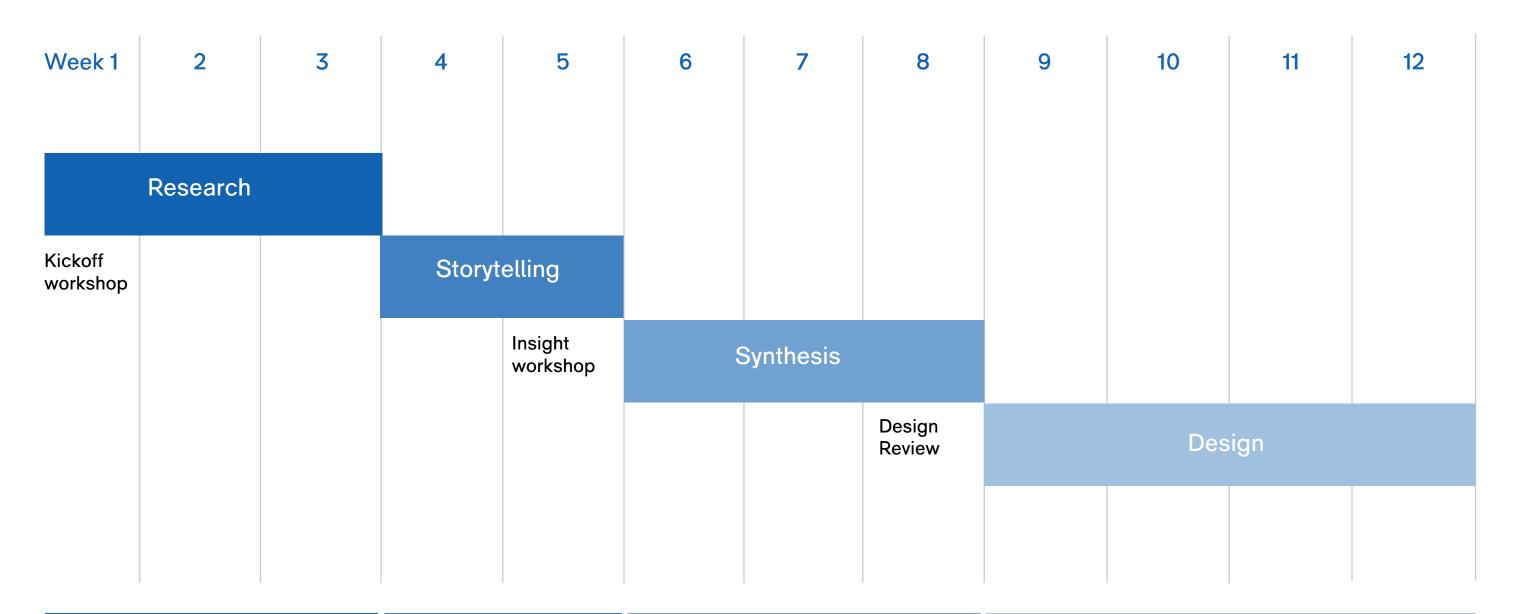
— Setting up for success, page 19

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This example should be used as a guide for planning your project. Using the format below, create your own plan; assign the amount of time you need to complete each stage, and mark out when key workshops and action points will take place, in order to keep to a schedule.



This stage indicates the amount of time you need This stage consists of drawing out to dedicate to collecting data: through desk research, observations, user interviews, etc., in order to inform the next stage.

the experiences of the user into stories which can then be shared back to the team.

In this stage, you take the stories and use them to narrow down the challenge you are going to address.

In this stage you design your product or service, developing and shaping it using the lessons from the previous stages.

Creative workshop template

— Setting up for success, page 23

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Although workshops differ depending on their specific purpose, this worksheet provides a general format to follow to support the development of new ideas by working together with people who have experience with your challange area. This will help to move the project forward.



User interview discussion guide

— Getting inspired, page 30

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There are several ways to approach users in order to capture their experience of a product, service or situation. Use the variety of methods set out in this worksheet to uncover the your users' perspectives.

Show me

If approaching a user in their own environment, ask him or her to show you the things they interact with (objects, spaces, tools, etc.) or have them walk you through the process in question. Capture pictures and notes to jog your memory later.

Think aloud

As they perform a process or task, ask users to describe aloud what they are thinking. This helps uncover their motivations, concerns, perceptions and reasoning.

Draw it

Ask participants to map out their activities and

people perceive and order their activities.

experiences through sketches and diagrams. This is

a good way to debunk assumptions and reveal how

Be specific

People often generalise about what's typical and leave out rich important details. Instead, ask people to talk about a specific period of time. Instead of what's your typical day like, ask them what happened yesterday.

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Concept capture sheet

— Developing insights and ideas, page 47

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Once you have produced several ideas, it's time to refine them into fully fledged concepts, concepts that you are able to test. Use this worksheet to develop these concepts so that you can present and communicate them in a tangible way.

What is the name of you concept?	What value would it bring to the organisation?	Draw your concept:
Describe your concept:	Are their any anticipated barriers/challenges to your concept?	
How does your concept work?		
	What are the key factors for success?	
Who is the target user?		

Prototyping tool

— Testing ideas through prototyping, pages 52 to 63

IDEO

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Prototyping enables you to test if a concept looks, feels and functions in the way it was intended to, in order to identify where improvements can be made. The worksheet takes you through the process.

Hypothesis



Try out your idea to judge whether it can work in real life



Test your idea again after having developed it further



Make a list of all the things that you need to make your idea real

Specify the main idea/concept/hypothesis that you want to test.

Build a small model of your idea using cardboard/paper, or any material you see lying around, to enable you to see your idea in three dimensions and check whether it would work smoothly. Act out parts of your idea when you meet with your target audience. How will they know how to use it? Try acting out different possibilities to learn about alternative ways of doing things. Capture your observations and reflections here.

Using the insights learned from the previous stage, build a new model of your concept. Once again test with your target audience and check whether changes or new elements work in synchronisation.

Capture your observations and reflections here.

List things like activities, resources, people and materials that you need to implement you idea and turn it into a reality.

Capabilities quicksheet

— Preparing for implementation, page 70

IDEO

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This worksheet assists you in assessing what you need to do to turn your concept into a reality. Complete the worksheet to discover what needs you may need to address to successfully implement your solution.

Distribution	Needs
E.g. do you need to source, store and distribute a product? Write your requirements here.	Using the requirements listed in the rows to the left, list here what your needs are in terms of capabilities. This information can then be used to inform the 'Staffing your project' (page71) and 'Creating a Roadmap' (page73) activities.
Capabilities	
E.g. are there specialised skills, such as technological capabilities, intrinsic to the development of your service/ product/process? Write down your requirements here.	
Partners	
E.g. are their external organisations or individuals who can support, assist or influence the success of your solution? Write down your requirements here.	