Applying Design Approaches to Policy Making: Discovering Policy Lab

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Arts and Humanities

Arts & Humanities
Research Council

Summary

This report reviews what design-based approaches bring to policy making. It results from an academic fellowship in which the author was embedded for one year in Policy Lab, a specialist team based in the Cabinet Office of the UK government. The report combines insights and quotations from ethnographic research and interviews as well as commentary from other contributors to the emerging community of practice around policy innovation.

Policy Lab was set up within the context of Civil Service reform and in particular the Open Policy Making agenda. Funded by and working with government departments, the Policy Lab team brings new methods and tools to policy making and supports their practical application by civil servants.

The key findings are that:

-Policy Lab supports organisational learning, exploring future policy making capabilities that can be routinised
-As well as providing practical help to departments, Policy Lab collaborates with them to develop hybrid new ways of working and to challenge existing ways of doing things in the ongoing mediation between politics, evidence and delivery
-Its approach involves setting up collaborative projects which explore problems and generate solutions through iterative learning cycles
-Its projects generate and build confidence in new insights and new policy ideas, which can then be developed via more conventional means leading to faster delivery and implementation
-Insights into people's worlds and their experiences of an issue re-order policy making and provide opportunities for challenging existing ways of doing things
-Policy Lab supports civil servants and their stakeholders to collaborate more effectively through constructive participation

Contents

Introduction

Over the past decade there has been increasing interest in design-based approaches in public sector and government contexts. Inspired by the success of design-centric firms such as Apple and Samsung, and by service firms delivering customer experiences over multiple touchpoints, ideas such as user-centred design, user experience, service design and design thinking have been taken up in central, local and regional government. A non-exhaustive (and UK-focused) list of teams and projects includes:

- The Innovation Unit in the Department for Education and Skills (2002)
- The Danish cross-ministerial innovation unit MindLab (2002)
- Design Council's RED unit focussing on public services (2004)
- Service design guidelines in the Cabinet Office (2006)
- Strategic design and ethnographic research in UN Institute for Disarmament Research projects (from 2006)
- Design of the Times in North East England (2007) and DOTT Cornwall (2009-2010) co-organised by the Design Council
- Experience-based design in the NHS (from 2007)
- Helsinki Design Lab set up by Sitra, the Finnish Innovation Fund (2009-13)
- The Government Digital Service (2011).

This is a fast developing area. A review of pubic innovation labs in 2014 covered 20 teams in detail from national, regional and local government, few of which focused on design*. An event held in London in 2015 brought together over 350 participants involved in public innovation labs, many sharing a commitment to experimenting with approaches from behavioural science to data science to design thinking**. Nesta, the co-organiser, estimated there were now 100 labs internationally.

On the basis of these developments, bringing design approaches into policy making within central government might be expected include the following:

- An orientation to understanding the experiences of people whose lives policy making intervenes into – being "human-centred" rather than system-centred
- An approach that develops and explores early-stage ideas through iterative prototyping
- Methods to involve people and organisations in research, idea generation and policy development.

So far there has been little academic research into design in the context of policy making. The question driving this study is what difference a design-based approach makes to policy making.

This report discusses the impact of one effort to bring design-based approaches into central government – Policy Lab in the UK Civil Service. Recognising the international interest in these activities, the report will where possible avoid UK-specific jargon. However the analysis rests on participation in and detailed observations of what Policy Lab achieved inside the particular culture and structures of the Civil Service.

So it's policy making by post-it note and anecdote?

Background

As a new initiative inside central government, Policy Lab emerged in the context of changes within the Civil Service. In response to challenges from politicians, think tanks, academia, the media and beyond, the Civil Service Reform Plan published in 2012* made commitments among other things to:

-Open Policy Making becoming the default – meaning that policy making always draws on a full range of external experts from academics to those who will deliver the policy
-Ensuring civil servants working on policy have the necessary skills and expertise, can use up-to-date tools and techniques, and have a clear understanding of what works in practice

A year later, a Civil Service report** promised to:

-Fund a Policy Lab to promote innovative techniques such as design-based thinking and ethnography to approach policy problems in a new way
-Develop a culture where openness to new evidence, involving a broader range of inputs and experts and experimentation is the starting point to solving problems and developing options by trialling, testing and iterating, constantly with implementation in mind

The increasingly complex and everyday lives of citizens call for a new way of anticipating the future that necessitates the continuous exploration and validation of concrete processes, knowledge, means and outcomes.

Jesper Christiansen, 2014, The Irrealities of Public Innovation. PhD thesis. Aarhus University.

A Civil Service start-up?

Policy Lab was set up in early 2014 to bring new approaches, tools and techniques to the work of policy officials in the UK Civil Service. Describing itself as a "proving ground", Policy Lab has worked with government departments on practical projects in the context of policy making, using a range of methods from ethnographic research to collaborative idea generation to prototyping.

Dr Andrea Siodmok, head of Policy Lab

Based in the Cabinet Office, in its first year Policy Lab had a core team equivalent to 2.4 full-time staff and an annual budget of £360,000 as well as in-kind support from government departments. Led by Dr Andrea Siodmok, an experienced strategic designer, Policy Lab works with a network of collaborators inside government and with specialist firms. It sees itself as a catalyst for change within the policy making community.

Informed by the principles associated with lean entrepreneurship, Policy Lab might be seen as a start-up inside government. Like many other start-ups, it had seed funding (in the form of investment from government departments for the first year, extended into a second year). It had a mandate to go out and find policy makers to work with, to explore what new tools and techniques could offer them and keep iterating.

Like other start-ups, Policy Lab operates in conditions of uncertainty about its future but as an internal venture it does this within a complex organisation with many silos. It must develop its offer, find people who want to work with it, get hold of resources, deliver projects, demonstrate impact and continue to build the business case for further investment. It has also had to deal with uncertainty in relation to the wider political environment such as the UK General Election in 2015 and the new government's Comprehensive Spending Review. Where the metaphor of the start-up is limited is because of Policy Lab's relationship to the wider narrative about change in the Civil Service. As a team inside government, Policy Lab's purpose is to support the development of new organisational capabilities, not to build a consultancy. Other initiatives have taken a different route. For example the Behavioural Insights Team set up in the Cabinet Office in 2010 was spun out in 2014 as a social purpose company co-owned by the Cabinet Office, Nesta and its employees.

Supporting the policy profession

In its first phase, Policy Lab has delivered on the commitments associated with Civil Service Reform and the Open Policy Making agenda. Through workshops, short projects and longer demonstrator projects, events and sharing of its tools, it has supported policy officials so that they can:

-Experiment practically with new techniques and approaches
-Examine policy problems through the lens of the experiences of those affected by an issue and others such as front-line staff
-Involve a broad range of perspectives and expertise in exploring issues and solutions
-Reflect on and change how problems are framed
-Generate a broad range of ideas for policy solutions
-Explore and develop ideas without committing to them too early
-Maintain a focus on how ideas can be implemented including the experiential and organisational changes that might result.
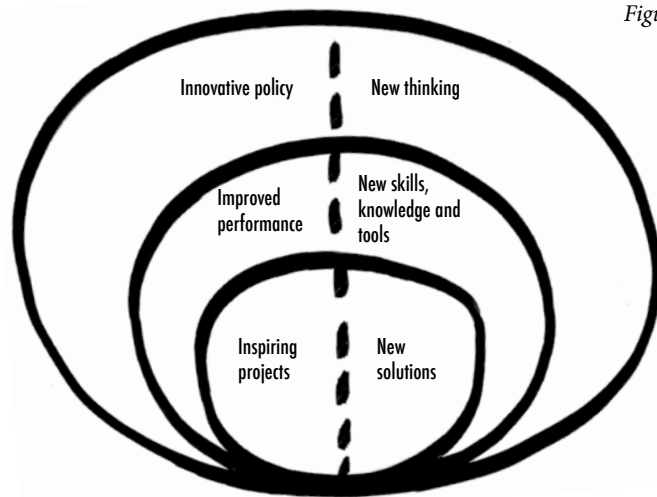
Figure 1.

However it is not yet possible to demonstrate that as a result, better policies have made, resulting in improved outcomes and experiences for people affected by a policy issue, or in substantial savings or better use of public resources. Most of the projects Policy Lab has worked on are at an early stage of development. So far one has developed into a government service that

Figure 1. Policy Lab. 2015. Detailed Guide to Working with and Commissioning Policy Lab.

is about to be implemented at scale. Savings are indicative rather than actual at this point. But even if many more outputs from Policy Lab projects were being delivered at the time of writing, it would still be difficult to show conclusively that it was Policy Lab that led to improved outcomes, since the nature of its work is highly collaborative. However there is evidence, which this report shares, that the investment in Policy Lab is having the desired impact within the policy profession. Further, as the discussion at the end of the report argues, Policy Lab's value is as "vanguard project" catalysing organisational learning. Its contribution lies in how it combines practical support for policy officials as they mediate between politics, evidence and delivery alongside raising questions about the nature of policy work.

About this report

Against this background, this report does two things. Resulting from an academic fellowship in Policy Lab, the study assesses the interventions Policy Lab made into policy making. These are described in four findings and short case studies. These are emblematic rather than forming a definitive statement of Policy Lab's work. Second, it discusses these empirical findings through two academics lenses, providing the basis of a framework to evaluate Policy Lab going forward.

The report is not intended to be an evaluation of Policy Lab. However it is part of the sensemaking about what such a resource can achieve. Its purpose is to share findings and provoke discussion. Designed with a visual style inspired by graphic novels and offering multiple perspectives rather than a single analysis, the report opens up the work of interpretation. It aims to reach a range of audiences interested in knowing more about the role of design in policy making, not least the people who consider themselves part of the policy community.

Design for policy requires the emergence of "the sense-making public manager":

-From resisting to embracing complexity
-From problem-solving to envisioning new futures
-From a system focus to citizen-centricity
-From unilateral action to shaping new alliances
-From facilitation to stewardship
-From policy-as-strategy to policy-as-impact*

Hello, I'm Polly Policy Maker. I want to find out more about Policy Lab

* Christian Bason (ed), 2014, Design for Policy

The cycle of Policymaking

BALANCE

Westminster World

Parliament

Prime Minister

Pressure groups

Constituents

Experts

Media

Other governments

Third sector

Academia

Whitehall World

HURRY UP

Business

Private Office

Politics

Evidence

Delivery

1. Analyse

2. Generate Options

3. Recommend
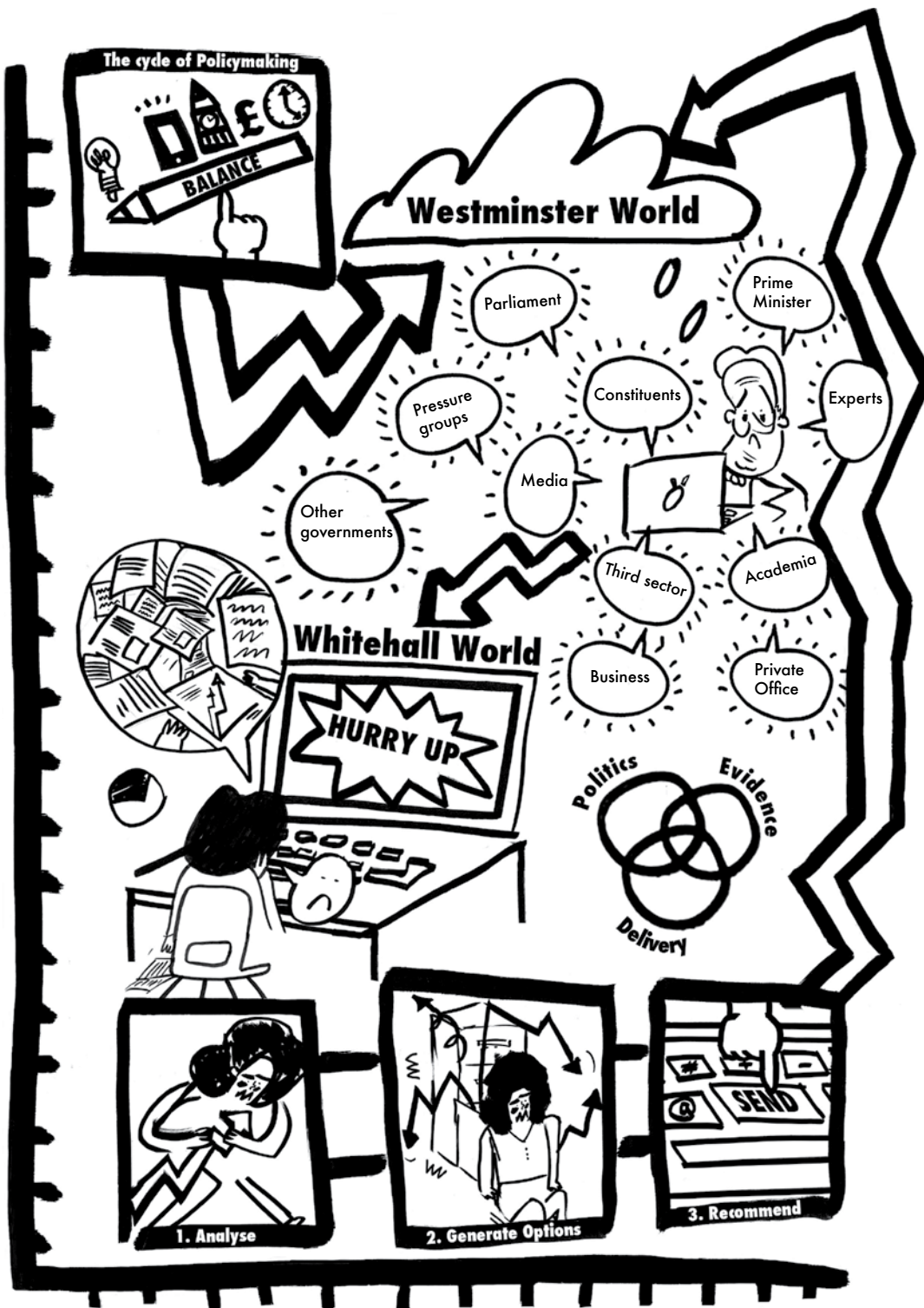
Finding 1

Policy making is an ill-defined professional practice in which civil servants mediate between politics, evidence and delivery to find solutions to public issues. Policy Lab sets up and enables collective learning cycles in which problems and solutions co-evolve and problems are reframed.

There are 17,000 UK civil servants defined as policy makers.* The policy community also includes those working in local government, think tanks, academia and civil society. They work with the other 24 "professions" in the Civil Service including researchers (eg the social research profession), those involved in delivering services (eg the operational delivery profession), or those involved in contracting with partners (eg the procurement profession).

There isn't a definition of what a policy professional but "in a way that's quite a good thing, because you don't want a closed cadre of policymakers."

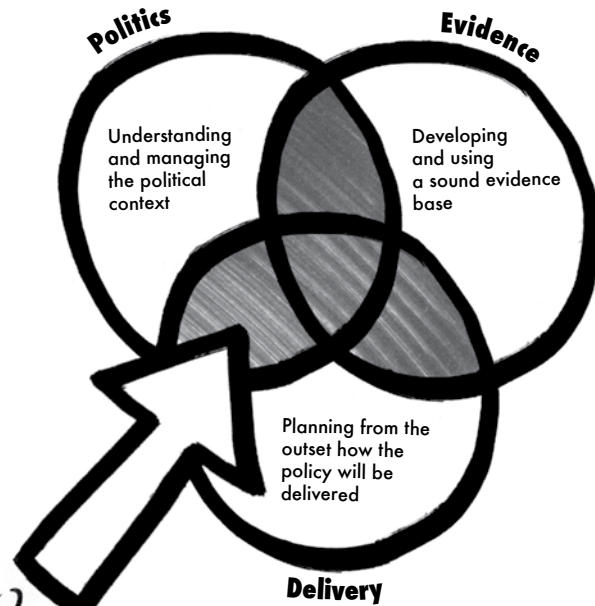Chris Wormald, Permanent Secretary at DFE and the Head of the Policy Profession**

Welcome

To

My

World

Wicked problems are cross-cutting .... we have a really simple matrix which is politics-evidence-delivery…The design question is how we bring it all together…We do it the wrong way round and we need to change that.

Mike Anderson, Head of Policy Profession, Home Office, speaking at Design Council event, November 2014

Politics

Evidence

Understanding and managing the political context

Developing and using a sound evidence base

Planning from the outset how the policy will be delivered

Delivery

Bringing It All Together?

There are four areas of activity where these three elements of successful policy apply although they don't necessarily happen discreetly or in a specific order and engagement happens throughout:

-Understanding the context
-Developing the options
-Getting to a decision
-Making it happen

Civil Service, Twelve Actions to Professionalise Policy Making: A Report by the Policy Profession Board, October 2013

You've got your policy, you passed your laws, it didn't work. Don't go into another seven year policy cycle.

Director, Cabinet Office

Policy makers gather and summarise evidence, suggest options and make recommendations for courses of action to deliver policy. They brief ministers to be able to respond to questions in parliament, or respond on a minister's behalf to letters from other MPs or others such as members of the public. Depending on their department, policy area, level of experience and role, they may draft bills to go in front of Parliament or liaise with other governments. They also work with other civil servants as policy moves towards implementation.

Policy making is an activity intended to achieve the purposes of elected politicians in government. The "policies" that this activity produces can be many different things including formal expression of activities undertaken by government to achieve outcomes e.g. through strategies, announcements, legislation, but also includes current practice, doing nothing, and political activity as well as activity that may not fulfil the goals of government in a simple and direct way.

Civil Service Learning, Policy Profession Skills and Knowledge Framework, 2013

We reviewed initiatives to professionalise policy making and identified an enduring gap between theory and practice.

Institute for Government, Policy Making in the Real World. 2011
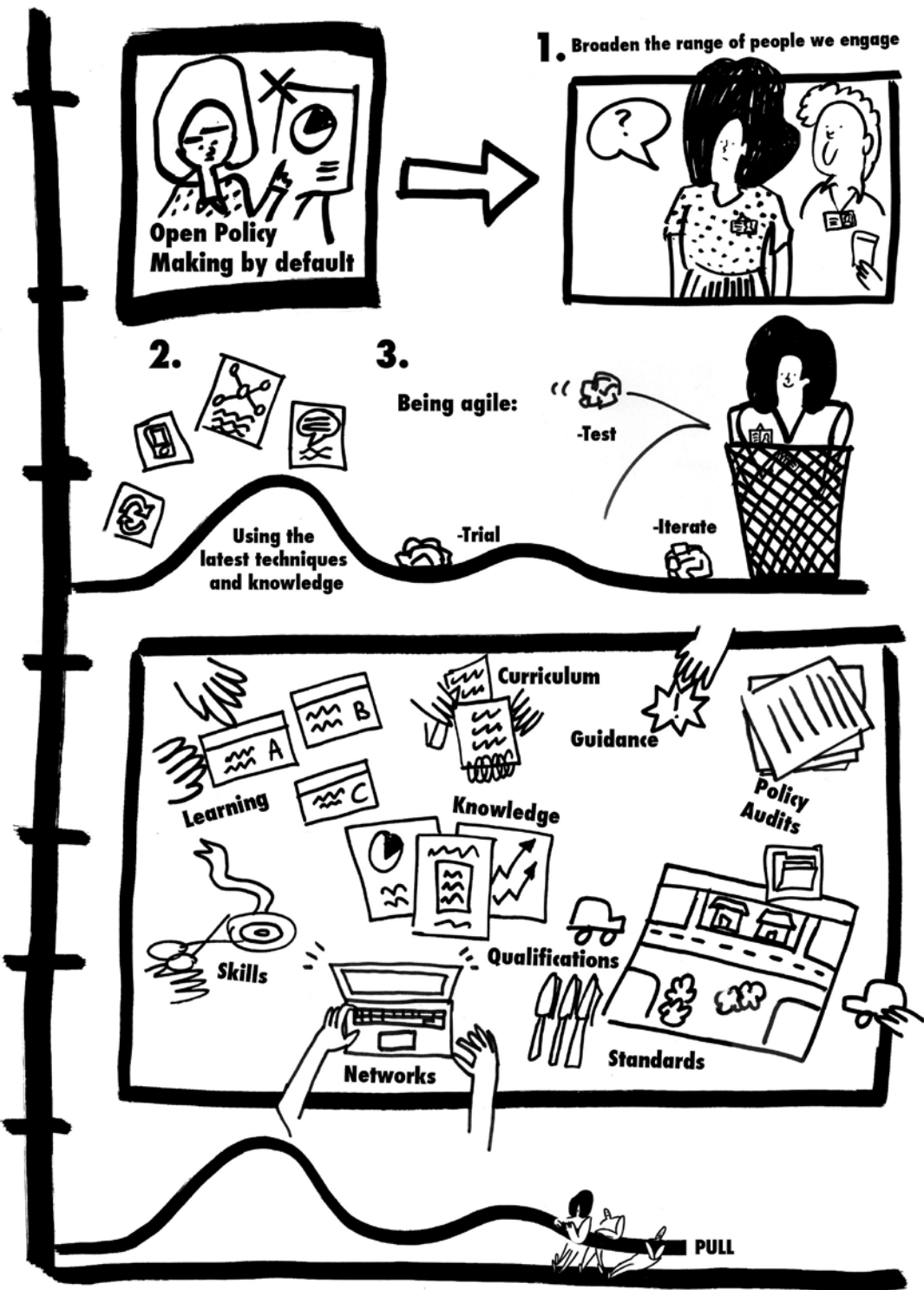
Policy making is in flux. The Civil Service Reform Plan (2012) emphasized the need to draw on a wider range of expertise and inputs to make policy and to ensure that policy advisers have up to date tools and data. The emerging "Policy Profession" has carried this forward with lots of activities. This includes setting up an Open Policy Making team and Policy Lab, both located in the Cabinet Office. Both teams work closely with government departments and external organisations.

Policy officials assemble evidence to analyse a problem and suggest solutions, using evidence of what works (where there is any). On the one hand, policy making is a collective process in which an individual civil servant is located within a departmental cosmology supported by formal and informal training and mentoring making policy in relation to a public issue and the actors involved in it. On the other, policy makers are often on their own, left to work out for themselves or with limited guidance how to make policy.

Bad policymaking is… narrow … trying to find an answer to [a] problem which … doesn't take account of its effects in other aspects of community or public service, isn't aware that someone clever just sitting down and trying to work out the answer to a problem is only one way of achieving the answer to a problem. Not looking to international experience, not seeking people's views, not testing it with folk at an early stage – all the opposite of Open Policy Making … [But] bad policymaking – and I've seen tons of it, it continues.

Permanent Secretary

[Trials] are a building block for creating a culture in which we can say not only do we not know what the answer is, we possibly may not be the people to work it out … We might be able to say instead 'I provoked the debate'… It's a new kind of policy maker and requires relentless changing of the mindset of policy makers.

Head of Policy Profession

Let's hack the policy cycle.

Head of Policy Profession

I'm going to a meeting to discuss some thorny issues, and the way we tackle it is to produce a very thick briefing, lots of paper with tabs. That's what I'd expect for most policy meetings that I attend. It's because we have a structured way of working here. Although we talk about the policy wheel and the policymaking cycle, and we acknowledge that it might be quite fluid rather than linear, we construct policies in a linear way. And we challenge in a detailed, structured way. I wouldn't say this was the best way to get different answers, different solutions.

Deputy director, Ministry of Justice

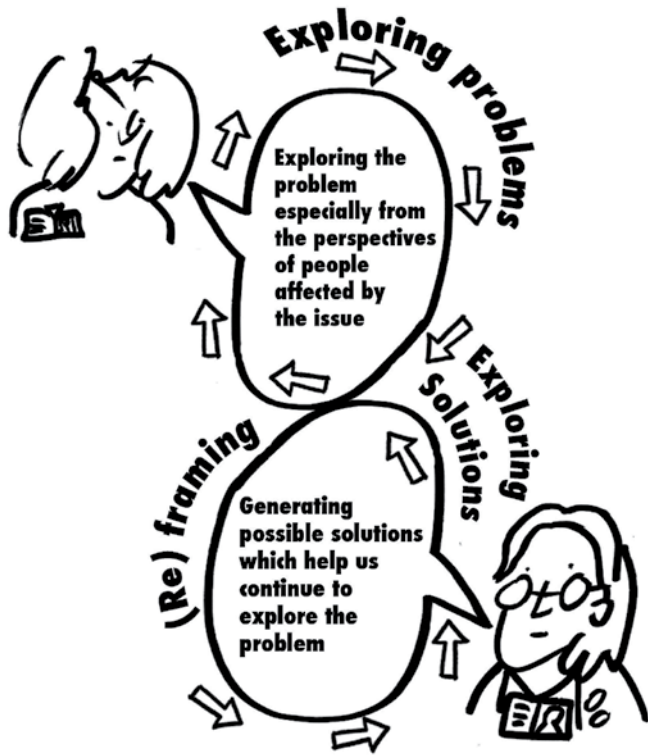*Policy makers learn the art of policy making by osmosis.*

Head of Policy Profession

Policymakers still convey the image of the gentleman amateur.

Senior civil servant

I have a week to write a two page submission to the minister with some new ideas about what to do…

Exploring problems

Exploring the problem especially from the perspectives of people affected by the issue

Exploring Solutions

Generating possible solutions which help us continue to explore the problem

(Re) framing

Dr Siodmok
@AndreaSiodmok

For me design is 'purposeful creativity' - a way to improve the world by making good ideas happen - it does this *with* others

31   31

Tweeted on July 9th

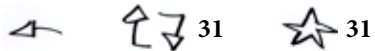Through applying the principles of design, Policy Lab sets up exploratory collective inquiries through which:
-Issues are opened up for exploration
-Problems and solutions co-evolve
-Problems are explored by creating provisional solutions
-Participants are positioned as co-researchers
This approach recognises that problems are made, not given. It positions policy making as collective learning.

A basic procedure of problem-solving is the generation of a short list of possible solutions that could be evaluated and compared…a countable set…. [Unlike problem solving, design produces] non-countable sets [which] are infinitely expandable.

Armand Hatchuel. Towards Design Theory and Expandable Rationality: The Unfinished Programme of Herbert Simon, 2001, Journal of Management and Governance, 5(3)

You have to be very careful when you say to a minister 'None of these things have worked before, we don't really know exactly what to do now, and we'll have to bring in other people to help us find a solution.' Because as an official you want to be able to give options and show that you know what you're doing. And actually be able to say 'We're in a space where there's a lot of ambiguity, and we're going to dwell in that ambiguity, and I want you to give me time to do that.' That's quite tricky.

Deputy director, Ministry of Justice

Inquiry is the controlled or directed transformation of an indeterminate situation into one that is determinate enough to hang together.

John Dewey. The Logic of Inquiry, 1932
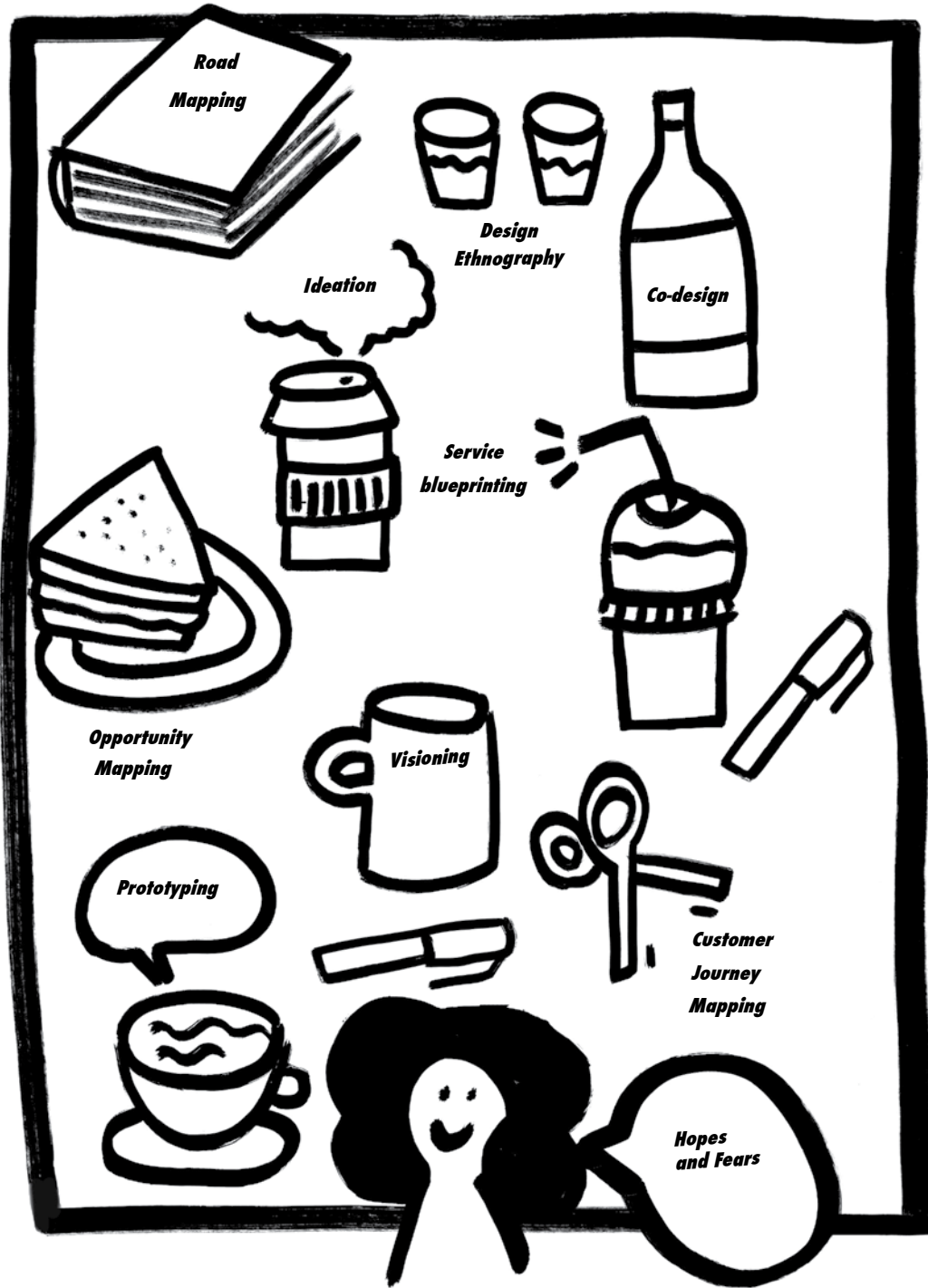
Policy Lab's expertise is in taking a structured creative and analytical approach, not in a policy area. It gives civil servants experiences of practical inquiries and methods which explore and frame problems and generate and iterate solutions.

Departments hated the old Prime Minister's Strategy Unit. They would come in and tell them the answer. What Policy Lab does is help them explore the question and find the best answers together.

Senior policy adviser

We are content neutral. We're not domain experts – although that might change.

Andrea Siodmok, head of Policy Lab

The ethnography has been really useful to engage people across departments and make them think differently. There is a little bit of a challenge about how you take quite small scale insights and harness them to produce something more concrete. But the nice thing about how Policy Lab works is there is very much a process for doing that. There's a momentum across the whole thing that is good.

Senior policy adviser,
Department of Work
and Pensions

Great list of buzzwords. But can you actually help me?

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Case study 1

Policy Lab demonstrator project with the Department of Work and Pensions (DWP) and Department of Health (DH)

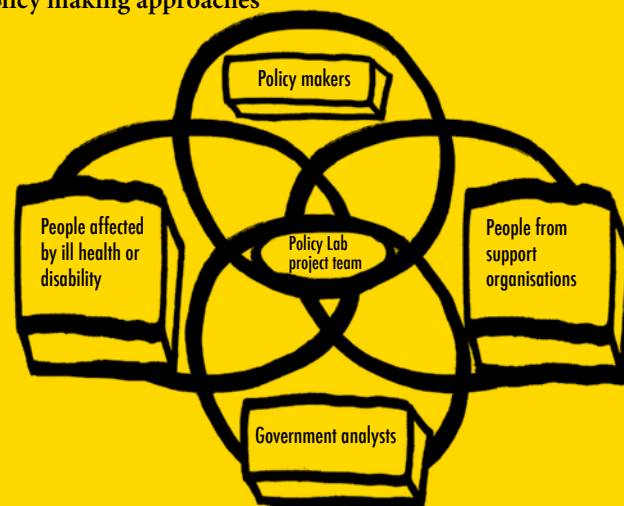Policy area: People in work who have long-term health conditions

This project involved a team of policy makers and analysts from two departments and specialists from the Policy Lab network working together part-time over five months. The departments wanted to try new techniques to understand the lives of those with, or at risk of, developing a health condition or disability and leaving employment, and use this insight to design new ways of supporting them to manage their health conditions or disabilities and stay in work or return to work quickly.

The approach taken by Policy Lab to the project involved:
-Setting up a collective inquiry into the issue, involving a broad range of participants
-Taking an exploratory approach resulting in new insights, new concepts, new framings and new connections between participants
-Maintaining a consistent focus on creating and using research findings
-Reordering the policy area by focusing on the experiences of people involved in the issue, both those with a health condition and but also professionals working with them such as doctors and support staff in public and voluntary services
-Building capabilities across the civil service
-Developing concepts to a point where there were ready to be explored in more depth using conventional policy making approaches

Project team:
-Policy Lab
-Keep Your Shoes Dirty
-Uscreates
-Department of Work and Pensions
 -Department of Health

Policy makers / People affected by ill health or disability / Policy Lab project team / People from support organisations / Government analysts

Policy Sprint

The project team took shape at a 2.5 day kick off workshop

At the sprint workshop, the emerging team:
-shared their hopes and fears for the project
-shared what they did and did not know
-mapped the experiences of people with health conditions
-defined research questions for the project
-developed a plan to answer them using ethnography, data science and prototyping
-got feedback from stakeholders with expertise in the issues

Figure 2.

A hope A vision for a simple and user need informed customer experience

A fear All talk and planning and no move towards a better solution

A hope New ways of seeing/ understanding why people remain in work/leave work and how we can support them better

A fear What we produce isn't read or used

The sprint allowed us to check out assumptions, terminology, understanding and how we've defined the problem with people working in the system we are trying to do something about. And it starts to engage stakeholders and build the buy in if we want to do prototyping.

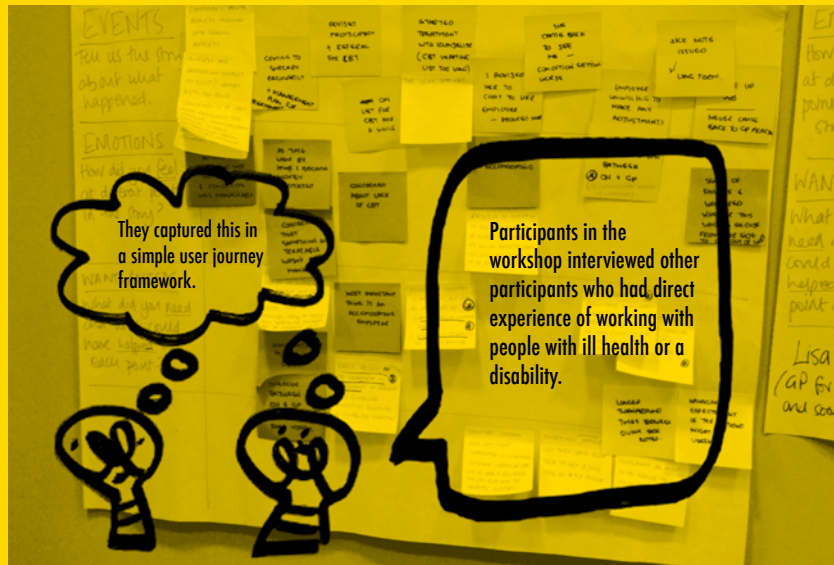Senior policy adviser, Policy Lab.

Figure 2. Policy sprint workshop

Starting with people's experiences

From the outset there was a shared focus on understanding people's experiences of ill health and working or not working. But there were different ways of thinking about what counted as a valid way to research this.

Figure 3.

What is good work?
Participant from Job Centre Plus

Our interest is different techniques to understand what's happening in people's lives before they start claiming benefits.
Participant from DWP

[Previously] we failed in the policy area because of an inability to understand and address complexity… we tend not to pick up the multiple aspects of people's lives.

Policy adviser, DWP

Figure 3. Getting early insights by mapping someone's journey in and out of ill-health

Ethnographically-informed research

Part of the research conducted by Policy Lab and its partner Keep Your Shoes Dirty involved in depth interviews with people with health conditions. The aim of ethnographic research is to understand people's lives in their own terms and using their own language. Where possible this involves participating in someone's world. Research ethics mean that people must consent to being part of the research.

Figure 4.
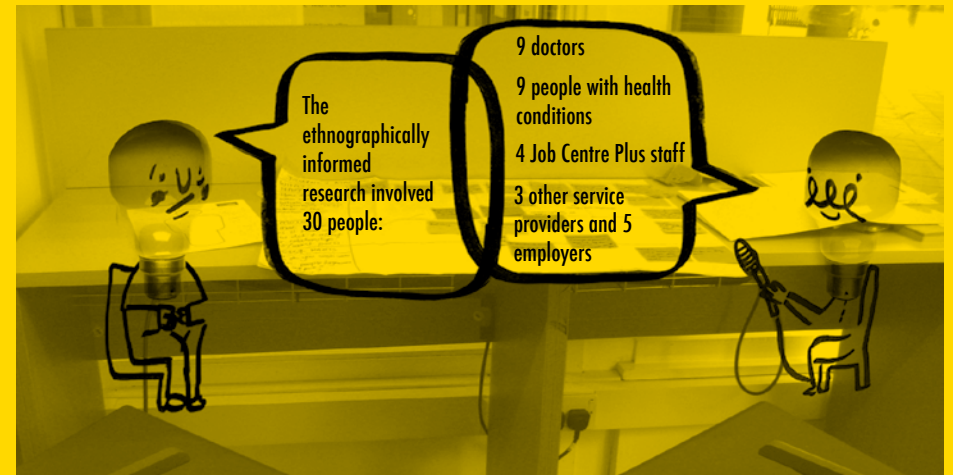
Even though [the policy leads] knew that they didn't understand the user journey, and wanted research into that, they didn't know what they wanted from it. Previously what they meant by user journey was intervention points with the system.

Senior policy adviser, Policy Lab

There's a lot of things going on in their lives, it's not just employment and health, it might be debt, not being able to communicate with their children. We're not very good at working out what's going in people's lives and working out what to do. Is getting another job the least of your worries?

Policy adviser, DWP

Figure 4. One to one in-depth interviews elicited details of people's experiences of ill-health and working

Guided visual research

Figure 5.

{There's a] large amount of ... work involved in managing employees with health conditions
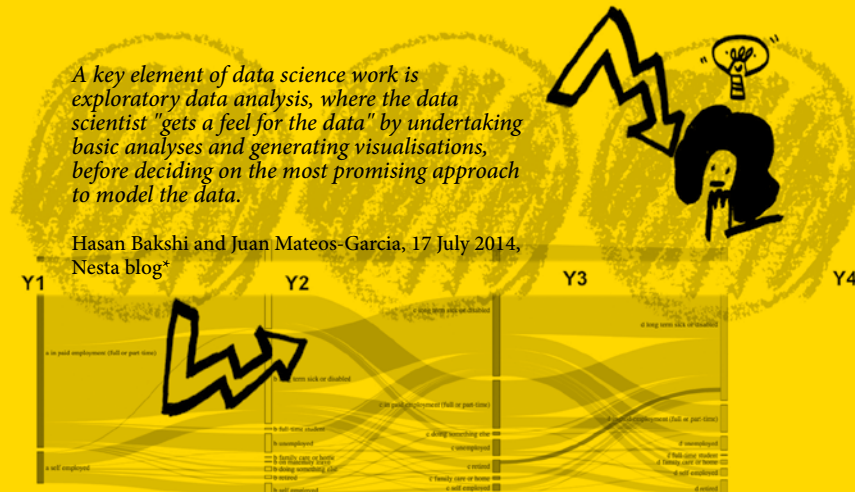
Kelly, large employer.

As well as doing interviews and journey mapping, the research team asked some participants to share an image that captured their experience of having or supporting someone with a health condition.

One insight was that the culture of the employer has a huge impact on health and employment outcomes, for example giving people space and time to recover, supported by clear communication and flexibility.

Figure 5. Photo chosen by research participant representing her world – supporting people with health conditions

Data science

Figure 6.

A key element of data science work is exploratory data analysis, where the data scientist "gets a feel for the data" by undertaking basic analyses and generating visualisations, before deciding on the most promising approach to model the data.

Hasan Bakshi and Juan Mateos-Garcia, 17 July 2014, Nesta blog*

The data scientist from Policy Lab's partner Mastodon C used the four-year Understanding Society survey to study those who self-reported as being in work in year 1 and moved into unemployment due to long term sickness or disability, and set that in context with other types of work statuses over four years. The analysis identified some specific (although not necessarily causal) patterns.

The project also used a data mining technique to segment people out of work into five groups, which generated some insights which could be used to tailor interventions more effectively.

Figure 6. Visualisation of analysis from data science research
*http://www.nesta.org.uk/blog/data-science-work-creative-work-part-1

From insights to opportunities

Figure 7.

At an insight sharing workshop faciliated by Policy Lab and its partners, policy makers and analysts from the two departments and others involved in the issue reviewed and discussed the research findings. Together they identified opportunities in which to generate ideas for new services, shaped by the insights. This was an important stage to tie the insights back to the policy intent.

It would have been weird if we had been surprised by anything. I think the value is in reordering things. There are multiple considerations and it added more power and authority to some. It gives them a status which they might not otherwise have. Like some of the softer things around user experience … It's stuff that people are aware of, but it gives it a stronger status.

Policy adviser, DWP

Figure 7. Participants sharing what they learned from the insights produced by the project

Co-design

Figure 8.

At a co-design workshop faciliated by Policy Lab and its partner Uscreates, 26 participants including doctors, employers, service providers and civil servants came up with six ideas, which they refined down to two service ideas for ways to support people, based on the opportunities identified earlier. A separate workshop involving some of the people with health conditions who had participated in the research also involved them in idea generation. The project team then synthesised these new service concepts.

There was this idea of coming back to the evidence. In other co-design processes I've been involved in … policy makers are concerned with their priorities rather than the evidence and it can be easier to fall back on what you think might work rather than what the evidence can tell you.

Participant

Figure 8. Participants generating ideas for new services in relation to opportunities

Prototyping

This wasn't a role play. When we said, "Do you want to go back to work?" it was very personal. ...We were testing a prototype but there weren't any assumptions about what the outcome would be.

Senior policy adviser, DH

The project team worked up some of the ideas further. One prototype took the form of a script for a potential interaction between someone needing support and a service. The second was a visualisation called a service blueprint showing how different resources could support people with a health condition.

The team got detailed feedback by walking through these prototypes with 52 people with first hand knowledge of the issue. This activity validated some elements of the concepts and generated fresh insights into the experiences of people with health conditions and what would make the service concepts work in practice.

> *[The policy makers] could all see what's in it for them... When we presented the first prototype they were excited but the main issue was the implementation – the bureaucracy and the contracting and commissioning so it was easier to step back and let Policy Lab and Uscreates do it. It's going to require them working in very different ways.*
>
> Project partner

Figure 9. Getting feedback on early stage ideas by walking people through what the future experience would be
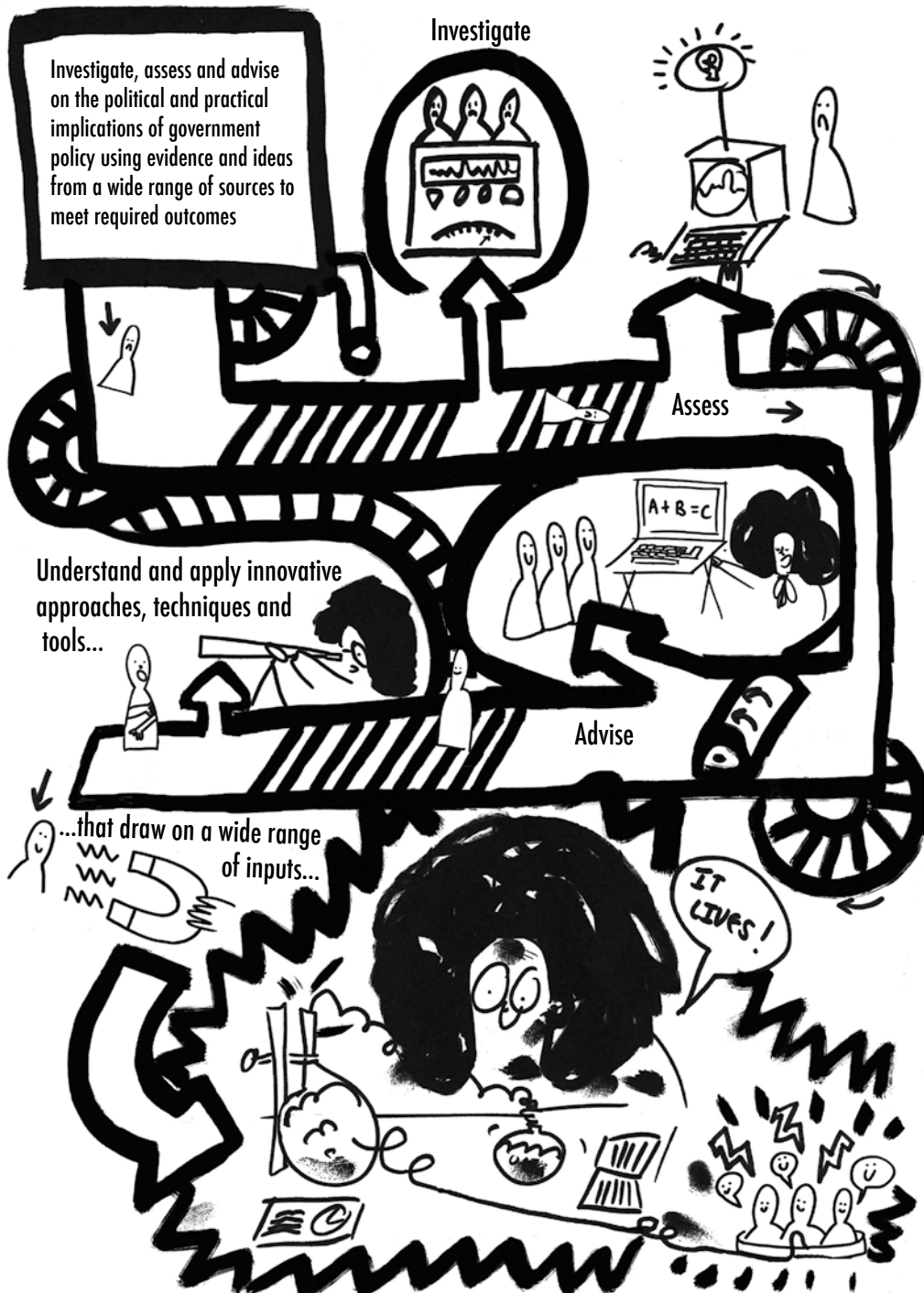
Choreographing the next phase

The project team reported three times to a board comprised of civil servants from both departments and from the Cabinet Office. Having reviewed the research insights and revised service concepts, the board agreed to move the project forward.

This would include but go beyond looking at people's experiences of the service propositions. For example week-long prototyping in job centres or with other organisations would explore the fit with existing services and the resources required to deliver the services. The project's research findings are also being used in other ways inside the departments.

> *For me the issue about prototyping points to how the teams need to work so closely together, almost sitting in the same space, it requires that commitment ...One of the things that would give them permission would be to go to senior person so they can do the prototyping and get resource. But the point we are making is to keep iterating and developing at a small scale before they go to a senior person or minister.*
>
> Senior policy adviser, Policy Lab

Evidence: Developing and using a sound evidence base*

Investigate, assess and advise on the political and practical implications of government policy using evidence and ideas from a wide range of sources to meet required outcomes

Investigate

Assess

Understand and apply innovative approaches, techniques and tools...

Advise

A + B = C

...that draw on a wide range of inputs...

IT LIVES!

... and improve the quality and pace of the anaylsis stage of policy making where it is appropriate.

Finding 2

Discussion about policy making is rooted in rationality and on the validity of evidence produced by induction and deduction to justify decision making. In contrast Policy Lab enables abductive approaches which generate new insights and ideas which are plausible but provisional.

Policy makers are valued for their analytical skills – being able to assess existing evidence or commission new research if needed. Policy makers who advise ministers directly have to be able to reduce a complex area down to a few pages in briefings and submissions.

Much of the evidence used to inform policy making uses mixed methods based on deductive or inductive reasoning in various combinations. Neither is self-evidently right. Different research approaches do different things and offer different kinds of validity, to allow policy officials and ministers to reach decisions. But in the culture of policy making, the deductive logic has the allure of offering definitive evidence.

Even in a good policy regime your average civil servant probably would not have access to anything better than some annualised data which stops in 2012, and they might not have the tools or capacity or ability to know what to look for beyond that … [They] wouldn't be able to switch on and call up a heatmap of emergency call-outs and work out how to distinguish causation from correlation on incidence of heart disease with incidence of trees in the street or whatever it is … The world of data isn't something anyone is terribly comfortable with in government – apart from the economists, and they're just interested in their 20 year forecasts.

Permanent Secretary

*Civil Service Learning, Policy Profession Skills and Knowledge Framework, 2013

Figure 10.

Evidence-based policy making and experimentation are gaining ground. The What Works Initiative* launched in 2013 is based on the idea that good decision-making should be informed by the best available evidence on what does and what does not work. The visibility of the Behavioural Insights Team (BIT) has brought a new focus on conducting randomised control trials (RCTs) to test policy interventions before introducing them at scale. These developments highlight the role of theories in policy making – of how people and organisations behave – and to what extent any theory is explicit in policy making.

Part of our role is saying we are getting the exam question right.

Policy adviser, UK Trade & Industry

Far better to test ideas out on a small scale rather than on a whole nation. Far better to let promising ideas improve before they're imposed on everyone. And far better to find out quickly if apparently brilliant ideas that work well on paper don't work well in practice.

Nesta, Better Public Services Through Experimental Government, 2015

Policy making is all about evidence. By which I mean hard science or as close as we can get.
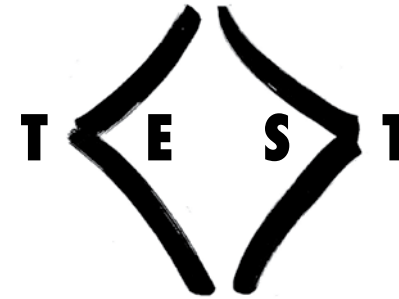
Test
What is your question?

Explore
Be creative. What is the evidence telling you?

Solutions
What are the possible solutions?

Trial
Run a trial to see if a solution works

At a recent roundtable we held with NESTA's Alliance for Useful Evidence to mark the publication of their report on experimental government, it was clear that we have seen increased experimentation in Whitehall over the last few years. But experimental and quasi-experimental methodologies are still under-used.

Jen Gold, 25 June 2015, Institute for Government blog**

We're all about evidence-based policymaking. However the reality is sometimes it's policy-based evidence making. You've got to be mindful that there is a predefined solution. And you are there to make it happen.

Deputy director, Ministry of Justice

Figure 10. David Halpern explaining the Behavioural Insights Team TEST framework at LabWorks event, July 2015

RCTs are the gold standard for evidence.

Senior civil servant

The RCT is not the only method. It's about asking what's the best evidence we can get in the circumstances. We want to get a robust answer that's good enough.

Academic member of What Works Programme Advisory Board

My own view is that the legacy of the Behavioural Insights Team will be a new kind of empiricism in policy making.

Dr David Halpern, director, Behavioural Insights Team speaking at an Institute for Government event, 2014

Do we have a theory of change? Where do theories come from?

Ben Williamson
@BenPatrickWill

Derek Miller tells #psilabs to get serious about theory to help explain how policy innovations work, not just #whatworks methods #lab-works

↶   ⇄ 7   ☆ 0

Tweeted on July 9th

Discovery

Abduction
Outside in
Develop an insight or make a guess linking a result to a rule

Induction
Bottom up
Generalise results across many cases to identify a rule

Deduction
Top down
Explore the consequences of a rule in a particular case

Justification

Trials gather data to see if a hypothesis is valid or not in a particular context: "If we do X, will Y happen?" Trials and much of the other evidence used in policy contexts are based on deduction and induction within a logic of justification.

But where do hypotheses and new ideas come from in the first place? What happens when there is very little data, or much of it is in disagreement? What if you have a desired outcome but are not sure what the constituent elements of a situation are and how they relate? How do researchers get to the point that they are able to isolate an outcome variable, which could be tested through a trial?

American Pragmatist philosopher CS Peirce proposed the idea of abduction as the logic of discovery. As a kind of reasoning, abduction produces plausible provisional results - insights, guesses and concepts that link things together in new ways. Abduction shows something may be, but does not prove it, whereas deduction shows something is true in a particular case. For Peirce, only abduction generates novelty.

What do you call the early stage of your work? Do you call it concept testing?

Lucy Kimbell

→

I call it wandering around … It's heavily qualitative. This idea of abduction is probably the missing piece. We are doing it in the best way we know how but it's not necessary the best way.
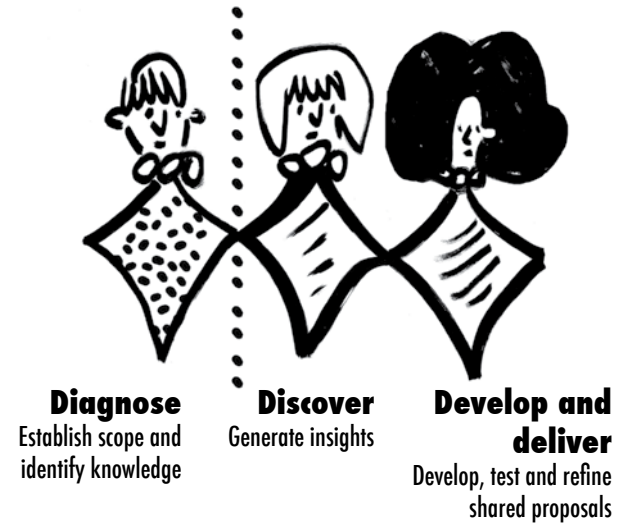
Behavioural insights specialist

Complexity is a system without causality. Our decision model here is probe-sense-respond … If an experiment succeeds we amplify it. If an experiment starts to fail we dampen it … We get emergent order – something that comes out of it is emergent practices, a new way of doing things, it's novel … it's different and it's unique.

Dave Snowden, Cognitive Edge

Figure 11.

Diagnose
Establish scope and identify knowledge

Discover
Generate insights

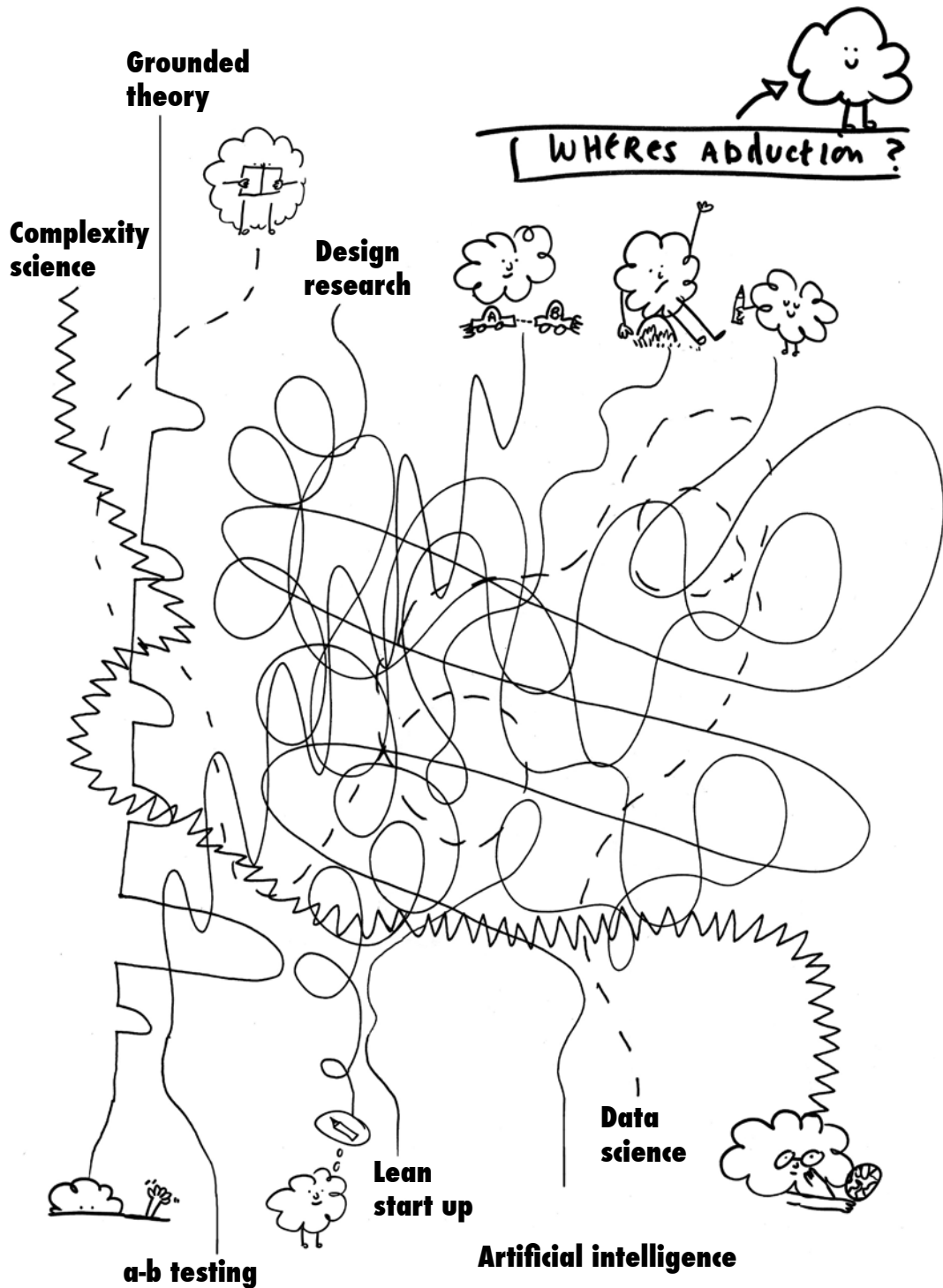**Develop and deliver**
Develop, test and refine shared proposals

Abductive reasoning underpins some social science research, agile collaboration and design expertise used by Policy Lab. Abductive reasoning produces insights and ideas that are plausible but provisional. They need further exploration and elaboration. Ethnographic research generates insights into people's worlds starting with their perspectives and using their categories. Agile collaborative methods enable teams to move forward by creating temporary snapshots of current understandings and ideas. Practical design research links things together in new ways to propose "what if…"

[M]anagement attention has begun to shift to the cross-functional front-end strategic, conceptual, and planning activities that typically precede the detailed design and development of a new product.

Anill Khurana and Stephen R. Rosenthal. 1997. Integrating the Fuzzy Front End of New Product Development. Sloan Management Review, 38(2)

Policy Lab is at the fuzzy front end of policy making

Figure 11. Policy Lab, Detailed guide to working with and commissioning Policy Lab, Summer 2015

Grounded theory

Complexity science

Design research

WHERES ABDUCTION?

a-b testing

Lean start up

Artificial intelligence

Data science

I had some skepticism about the [Policy Lab project] but realized in the workshop people weren't having those reactions, because the space was structured to make people think "what if?" Let's ignore those big elephant in the room this could be really difficult and take 5-10 years to do, it was breaking it down and making it much more tangible, so the people who maybe normally would start by saying "That'll never happen" – it swept that out the way. Even I found myself thinking "Ok yes...", I'll engage because you've broken this down to something I can really get my head around.

Deputy director, Ministry of Justice

There's a tension between having something resolved enough to engage people but with enough roughness and ambiguity so people feel they can contribute to it

Senior policy maker, Policy Lab

I'd call myself a policy designer rather than a policy maker ... I feel more credible now... Before it was about having the killer statistics. Now it's about having the killer insight.

Senior policy adviser

Instead of asking what works (based on past evidence), sometimes you have to ask what else might work (in the future)

Case study 2

Doing exploratory research with new techniques: Using ethnography and data science to generate insights

In the project with the Department of Work and Pensions (DWP) and Department of Health (DH) (see case 1), Policy Lab used ethnographic and data science techniques to generate insights into the policy area. The aim was to support policy makers and analysts from the two departments to try out using new techniques.
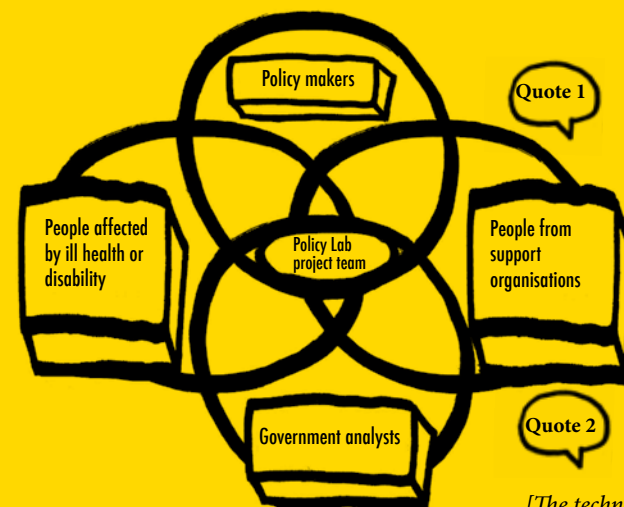
Policy Lab collaborated with two specialist firms in parallel. One project led by Keep Your Shoes Dirty used an ethnographic approach to produce insights into people's experiences of ill-health and work. The other condutcted by Mastodon C used data science techniques to identify patterns and segments within a large data set.

The findings from these small projects were shared within the project team in workshops and via email. They were also circulated more widely in the two departments, including with senior civil servants.

Both research projects produced insights which supported the project team in three ways. First, the insights reframed their understanding of the policy issue from being about unitary individuals with health conditions, to a more nuanced view of people whose experiences and management of ill-health were closely tied to their interactions with others. Second, the approach generated linkages between factors which had not been explored much in other evidence. Third, on the basis of these findings, the project team defined specific opportunity areas in which to generate new concepts for services to support people.

Overall the two projects produced findings that were useful to the policy makers in the two departments directly involved in the health and work project and exposed them to methodologies that they were not familiar with. But the research also raised questions about how and when these approaches intersect with other types of research, as well as which has more legitimacy and why.

The project also surfaced the challenges of sharing research findings which, since they are about holism and depth, resist being summarised in one or two slides of bullet points. Research products such as "personas" informed by ethnographic research can make such findings portable, accessible and re-usable.

Policy makers

Quote 1

People affected by ill health or disability

Policy Lab project team

People from support organisations

Government analysts

Quote 2

It's captured imaginations. It's changed the dialogue a bit. But I don't think you can just dabble with it. It's required a lot more resource than I'd imagined. On lots of things – trying to get useful things from the designers, ethnographers and data scientists requires a lot of coordination from us.
Senior policy maker, DWP

[The techniques used by Policy Lab are] nowhere near being mainstream but it's entering the conversation. And there's a noticeable appetite for it among senior civil servants.
Senior policy maker, DWP

So we've got new techniques, resulting in new insights and we feel closer to users. But what do we do with this?

Quote 3

Doing ethnography and data science in parallel informed each other's investigation and provided direction to each other. It was great to have some indicators to follow up on from the data science side as it helped shape our lines of enquiry and guide our observation technique and lines of questioning with participants.

Ruth Edmonds, Keep Your Shoes Dirty (ethnography)

Quote 4

Because we were choosing from thousands of possibly relevant indicators, it was great to have pointers that they'd discovered through other work, that we could then see if we could validate within the data. In an ideal world, you'd have some feedback loops between the two teams as we did, but with some more elapsed time so that we had time to consider and discuss in more detail. For example, each team might break its work up into two or three cycles, happening at alternating periods, and with a handover call at the end of each cycle to update on what we knew, hypothesised, or wanted to discover.

Fran Bennett, Mastodon C (data science)

Quote 5

When we got the ethnographic data back I found it fascinating and I thought it did help – to the extent that it told you about these cases. The difficulty is that in order to inform policy development, and decisions that have to be taken by ministers, there are a number of steps that you need to go through in order to reassure people that the evidence that you're basing decisions on is robust. Therefore a key criterion is 'Is it representative?'

Analyst, DWP

Quote 6

It's been really helpful in terms of giving us sufficient insights to justify the case for further analytical work. You would want to take those ethnographic case studies that were produced, and the first step in an ideal world would be to do a larger scale qualitative piece exploring the extent to which the issues raised among those case studies play out among key groups of interest. And the next step would be to quantify those issues. And only then can it feed into the modelling and the policymaking decisions.

Analyst, DWP

Quote 7

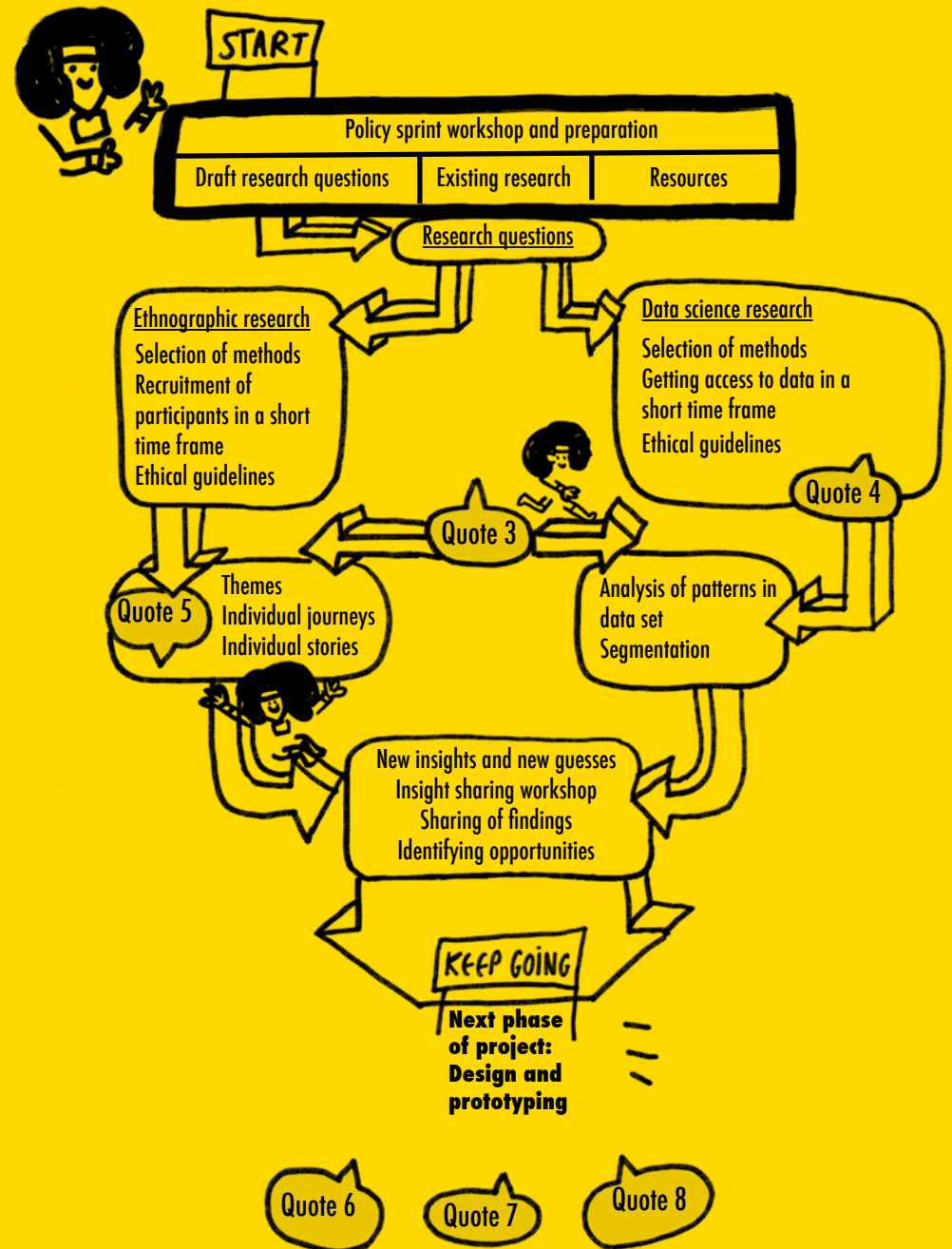*Some of the insights are useful to inform our policy design going forward. What we design is subject to ministerial will.*

Senior policy maker, DWP

Quote 8

The ethnographic research created persona characters that were useful. I will go back to them but when I'm down the line. But right now we are at the classic civil servant phase of defining the problem. When we are suggesting policy ideas it will be good to look at the personas to say, what would work for this persona?

Senior policy adviser, DH

START

Policy sprint workshop and preparation

| Draft research questions | Existing research | Resources |

Research questions

Ethnographic research

Selection of methods
Recruitment of participants in a short time frame
Ethical guidelines

Data science research

Selection of methods
Getting access to data in a short time frame
Ethical guidelines

Quote 4

Quote 3

Themes
Individual journeys
Individual stories

Quote 5

Analysis of patterns in data set
Segmentation

New insights and new guesses
Insight sharing workshop
Sharing of findings
Identifying opportunities

KEEP GOING

Next phase of project: Design and prototyping

Quote 6   Quote 7   Quote 8

Finding 3

Policy makers tend to think of people as service users, beneficiaries or stakeholders within a system. In contrast, Policy Lab's approach shifts the focus to people and how they experience things, which reorders the policy area.

Ethnographic research is in demand as a way for organisations to understand people's lives to inform strategy and innovation. Although less common than quantitative research or focus groups, ethnographic approaches are increasingly visible. Policy officials see such research as a way to understand people's lives which otherwise they may not have access to. But ethnographic research does more than reveal users and their needs. It can generate insights into patterns of meaning in ways of living and working, uncover hidden assumptions and challenge organisational silos.

There are two major reasons why ethnography has recently gained popularity in the corporate world. First, ethnography is conducted in context, providing new insights into the other objects, people and products that consumers are currently using. … Second, and perhaps more importantly, ethnography is gaining attention because it takes a particular stance its practitioners call the "emic" position. That is, ethnographers strive to take the participants' point of view … [and] see what would otherwise be invisible.

Sam Ladner, Practical Ethnography, 2014

A parent in her world

Open-ended questions:
What is good parenting?
What is childcare?

Hopes
Dreams
Fears
Routines
Symbolic structures
Patterns
Policy Lab's ethnographer
Policy maker/civil servant
The law
School

Data
Audio Clips
Video Clips
Photos
Notes

Interpretation
Day in the life
Journeys
Themes
Insights
Stories

Anthropology and ethnography have created a space and a process for organisations to reshape their understandings of the world and their understandings of how thy have those understandings.
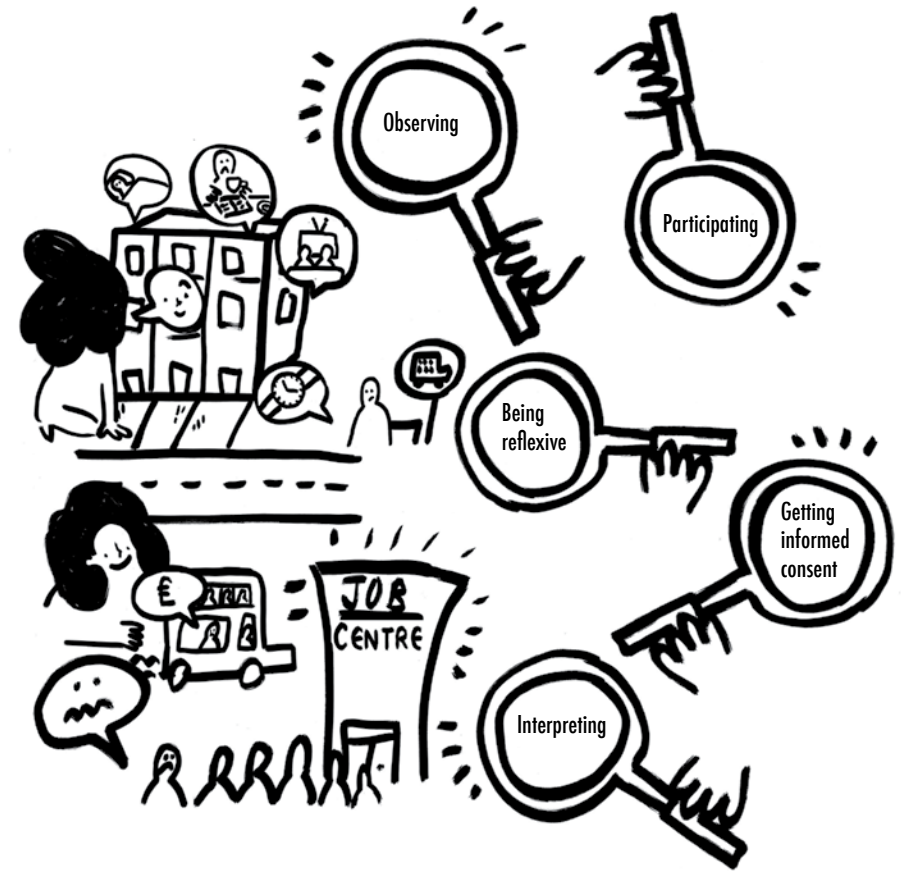
Simon Roberts, Stripe Partners speaking at Open Policy 2015 event, Cabinet Office

Ethnographic research takes many forms but is particularly associated with participant observation. It aims to understand the practices and systems of meanings that animate daily life for participants in a social world. Ethnography might describe someone's "user journey" or experiences relating to a policy issue or of using a public service. But more accurately, ethnographic research generates insights into the culture in which someone participates.

An interpretivist is interested in understanding what the world means to people. Ethnographers believe that people create meaning about their own worlds, everyday. This is the very definition of culture, as defined by anthropologist Clifford Geertz. He argues that culture is the meaning people ascribe to objects, people, activities and institutions. Ethnographers uncover that meaning.

Sam Ladner, Practical Ethnography, 2014

Great - we want to know about users' lives

For you, they are users. But first of all they are people in their worlds

Observing

Participating

Being reflexive

Getting informed consent

Interpreting

We have five principles:

-Listening
-Iterating
-Reflecting
-Observing
-Participating

Ethical guidelines from Policy Lab project partner Keep Your Shoes Dirty

The danger as a civil servant is that you apply your own knowledge and experience of the issue. …[Ethnographic] research gives us a better understanding of the complexities of people's lives – so in childcare, for families it's not just about childcare.

Policy adviser, Department for Education

Commissioning and using ethnographically-informed research in government is still at an early stage. On the one hand, people promoting it face the challenge of it not being seen as representative in contrast to approaches that create large data sets and not being considered as robust because it relies on interpretative approaches which may be unfamiliar. On the other, through its stories and thick* description, it brings to life people's worlds and helps reveal opportunities for new ways of doing things. Double-sided ethnography focuses both on people using a service or benefiting from a policy intervention, as well as people involved in delivering it.

Having actual examples from real life people who you obviously interviewed in depth and for a number of hours meant that [we understood] their whole experience not just [the service] but the whole process and how unsure they felt and how lacking in confidence about everything – that was very powerful.

Deputy director, Ministry of Justice

The plural of anecdote is not data.

Senior policy adviser, Department for Education

There's a myth that ministers want hard evidence. They are always talking to constituents and being influenced. So the question is how to counter the challenge of "We don't want policy by anecdote."
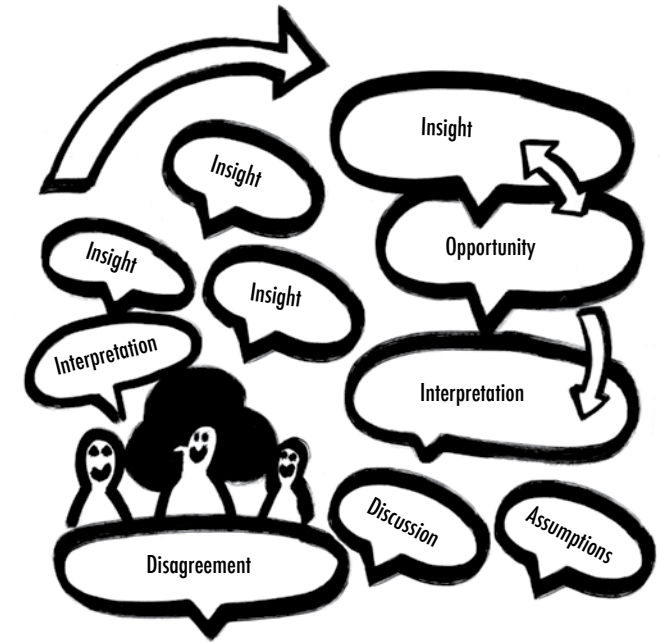
Senior policy adviser, Cabinet Office

I'm inside but... I have to start outside

It took you straight into the problem from a user perspective and helped us focus on what the user journey would feel like.

Participant, Ministry of Justice/Policy Lab co-design workshop

Insight

Insight

Insight

Insight

Insight

Opportunity

Interpretation

Interpretation

Disagreement

Discussion

Assumptions

Policy Lab feels like it's building up insights and understanding as a goal in itself. About having a much better understanding of the people you're ultimately dealing with … And it feels like it's more of an attempt to embed things within the policymaking process throughout. Whereas Behavioural Insights will design a small scale trial around a particular intervention.

Senior policy adviser, Department of Work and Pensions

[A simplistic user-centred approach] would have wanted to make it easy for people to get divorced. That's the logical extension of "make it easy for users" – the divorce app where you can get divorced quickly and easily rather than going through a slow process. But there are policy areas where ministers don't want to make it easy – like getting divorced or signing up for some benefits.

Senior policy adviser

*Clifford Geertz, Thick Description: Towards an Interpretive Theory of Culture, The Interpretation of Cultures, 1973.

Case study 3

Exploratory prototyping in policy making: Creating learning devices

Figure 12.

Sketch   Sketching User Experiences   **Prototype**

Sketch		Prototype
Evocation	→	Didactic
Suggest	→	Describe
Explore	→	Refine
Question	→	Answer
Propose	→	Test
Provoke	→	Resolve
Tentative	→	Specific
Noncommital	→	Depiction

Policy Lab has developed ways to use prototyping to support policy officials to explore andterate concepts at the early stages of policy development.
Prototyping takes many different forms, from assessing if people can achieve specific tasks when presented with a website or form to fill in, to using role play to explore how people might engage with future services. The emphasis is on understanding people's concrete, contextualised experience.

The idea of prototyping is already familiar to some people within government. For example the Government Digital Service (GDS) has a clearly defined process to develop digital services from discovery to going live (and possible retirement). Informed by the principles described in Finding 1, this includes alpha and beta testing. This approach and this terminology have permeated the policy making community in government departments that have been involved with GDS or have built up digital capabilities.

Figure 13.

- Discovery
- Alpha
- Beta
- Live
- Retirement

Designers often reach for the word "test" to explain what prototyping achieves. But when compared to randomised control trials and other methods based in deductive and inductive reasoning (see Finding 2), prototyping can look less rigorous. Based on a clear hypothesis derived from theory, a trial is designed to gather data to see if a proposed intervention has the intended effect or not. A trial results in increased certainty about a proposed course of action in a specific context, supported by data judged to be statistically significant. Designing a trial usually requires selecting a small number of factors about which data can be gathered.

While some kinds of technical beta prototyping are close to trials, exploratory prototyping (product discovery or alpha prototyping in GDS) is based in an abductive approach. Exploratory prototyping does not aim to produce certainty but it does demonstrate the plausibility of solutions. For example observing and discussing how someone engages with a mock-up of a proposed service touchpoint helps a multi-disciplinary team explore the user's experience and aspects of delivery – but only if those who know about the realities of people's worlds and of implementation are involved in the activity.

Such a prototype might include multiple, interdependent factors. These are informed by guesses – which may not yet be explicit – about what the experience might be for a segment of the target user group or service personnel and what shapes this, or about the organisational capabilities or other resources required. It explores the systems of meaning as well as the practicalities around a proposed intervention. While a trial is limited to testing few outcome variables, a prototype bundles up many variables within a proposed experience. Prototyping helps surface the relevant factors and guesses, that can later be tested through other methods.

Exploratory prototyping can be done quickly and cheaply as the examples in this section show. In Policy Lab's work there are usually several cycles of prototyping drawing on different kinds of expertise about people's worlds and about delivery, to gather distinct perspectives about the context and proposed intervention. Such learning cycles result in proofs of concept that are more likely to be implementable, which can then be further developed via beta prototyping, small-scale pilots and trials.

Further, in addition to producing evidence about the plausibility of whether a proposed solution works or not in a specific case, the discussions that result often generate new insights into the problem and new concepts to explore. Prototyping continues to investigate a problem, while exploring solutions to it (see Finding 1).

So exploratory prototyping achieves several outcomes in a policy project. It increases the likelihood of a proposed solution working in the real world. It helps reduce wasted resources from going down a path that won't work. It also helps a project team learn more about the issue they are working on. It generates new ideas, both changes to the existing proposal but also entirely new ones. Finally it enables a team to go through learning cycles together. As a result, exploratory prototyping associated with design supports organisational learning.

Ideas can be ugly… It's only when you start working in the same medium your users will be using (for online services that's generally a web browser, but it may also be via an API (application programming interface)) that you can really understand the experience you need to provide.

Government Digital Service, Government Service Design Manual

[L]earning devices … are more than means to test solutions. They are designed to learn about what has to be learned or could be learned: a drawing, a mock-up, a prototype, a scientific experimental-model, and a rehearsal are usual "learning devices" … [D]esigning the appropriate learning devices is a central aspect of a design process.

Armand Hatchuel, 2001, Towards Design Theory and Expandable Rationality: The Unfinished Programme of Herbert Simon, 5(3)

I get how to prototype a digital service

But how do we prototype policies?

Table top prototyping

Policy Lab's demonstrator project with the Home Office and Surrey and Sussex Police created insights into people's experiences of crime and their reporting of it (or lack of reporting) to police, with the support of specialist research firm Keep Your Shoes Dirty.

Informed by these insights, participants in a workshop facilated by designer Sean Miller reframed the original challenge from increasing online reporting of crime, to supporting people affected by crime. Participants created and shared simple physical models of their ideas, which ranged from end-to-end services supporting people through the Criminal Justice System to a peer support service.

The resulting discussion led to a shared understanding about the range of possible solutions. Concepts that emerged and were refined in this workshop and other similar workshops were then taken forward to the next stage of the project.

Figure 14.

Prototyping builds confidence about a proposed direction of travel. It finds the vectors of the problem and the solution.

Andrea Siodmok, Policy Lab

Eco Archive

PAK

Figure 14. Collaborative idea generation and exploration via table top prototyping

Paper prototyping

Policy Lab worked in collaboration with people who had been affected by crime and with students from the Royal College of Art to generate possible service concepts.

During the workshop, people organised simple cards which denoted different activities such as "urgency filter" and "share your story" and "online chat" (generated in previous workshops) into particular combinations representing people's journeys.

These designs for service journeys created by users were synthesised into a possible experience framework for an online service. The proposed platform would enable people to report crime, get help from the police and share their accounts of crime with others.

A digital prototype was then alpha and beta tested with one police force, resulting in new learning and revisions to the original design. The service is now ready for roll out across England and Wales.

Figure 15.

Figure 15. Exploring future service experiences

Prototyping experiences across multiple touchpoints

Figure 16.

In a project with HMRC, Policy Lab did several cycles of prototyping to explore new ways of communicating with young people with the help of its partner Livework. In its early interviews with young people, the researchers took along a physical mock-up of a smartphone showing an imagined future government website.

In a project with HMRC, Policy Lab did several cycles of prototyping to explore new ways of communicating with young people with the help of its partner Livework. In its early interviews with young people, the researchers took along a physical mock-up of a smartphone showing an imagined future government website. This enabled rich and detailed conversations with participants. In response to the findings from this research, the project team developed several concepts and then took them further via prototyping. One prototyping cycle took place in a college involving young people in crafting letters they would like to receive from government about the service.

A follow up workshop involved as participants civil servants from different specialisms including delivery and other young people. Participants reviewed the draft letters created by the young people in the college, reworked and shared them, generating new insights to the young people's worlds and new concepts to explore. This resulted in a revised set of letters that could be prototyped further.

A subsequent stage involved creating a walkthrough of the future experience of people engaging with government. This was visualised in a series of Powerpoint slides that the project team could share easily. These showed hand-drawn sketches of what users would interact with (eg a letter from a government department, a text message, a web page viewed via on a smartphone) and how they might respond. Doing the walkthroughs with stakeholders including young people, policy and delivery staff confirmed the concepts as worth taking further and revealed some of the practical and organisational implications. The learning from this prototyping, including design principles for engaging with young people, was used by other teams within government departments.

Figure 16. Using mock-ups of future touchpoints with the research phase

Surfacing organisational culture by prototyping experiences

Policy Lab recruited civil servants who are also actors skilled at improvisation and worked with them to develop a one-hour session to explore concepts for assessing the capabilities of policy makers. This involved two actors improvising future scenarios in front of a group of people from government departments who would be affected by the proposals.

During their improvisation around future interactions that might form part of the new assessment system, the actors "used" paper mock-ups of digital platforms and referred to organisational processes and activities – both existing ones and those that the new proposals might result in.

The approach was based in the idea of provotyping* – presenting new ways of doing things, in ways that were intentionally provocative. The aim was for the improvisation to surface some of the taken-for-granted cultural aspects of the way the organisation works at present. As well as allowing participants to assess the plausibility of the concepts and whether they would work in practice, this approach supported a very nuanced, open conversation among participants in the discussion. It helped to build a mutual understanding between the project team and the users in the context of their current practice and about what was required for the new proposals to work.

Figure 17. Civil servants acting out future scenarios

Preben Mogensen, 1992, Developing a Provotyping Approach in Systems Development, Scandinavian Journal of Information Systems, 4(1)

Reaching people who don't want to get involved via pop up prototyping

During a project to support the Policy Profession, Policy Lab's team including consultancy Studio INTO developed a way to do "pop up prototyping". In this case the users of the future service were civil servants. The intention was to engage people who would be unlikely to respond to invitations to workshops or surveys. The team organised a desk drop, folding a specially designed leaflet on computer monitors across two government departments. These provocative leaflets invited people to come along and share views about changes in the profession at specific locations and times in their building. Members of the project team were available for people to talk through the new proposals with, including using paper prototyping to capture their feedback.

As a result 40 people from a range of teams and civil service grades participated in in-depth conversations about the proposals. This method enabled a wider range of inputs to the project and surfaced criticism of the proposals early on. It accessed people who had strong opinions about and insights into the proposed concepts, but would not have responded to surveys, emails or workshop invitations. It also generated new ideas based on what people would value that other research had not uncovered.

Figure 18. Rich conversations about the design of future assessment systems platforms

Learning from prototyping experiences and systems

During the project with the Department of Work and Pensions and Department of Health (see case 1), Policy Lab organised a cycle of prototyping to iterate concepts in collaboration with civil servants from the two departments and designers from partner Uscreates. When developing the prototypes, the project team stated up front their current guesses about how people might access and interact with the proposed services, informed by earlier research.

During the sessions in which stakeholders interacted with mock-ups of the service prototypes, the team took detailed notes, which they then reviewed together across all the prototyping. Policy Lab also logged decisions made during discussions among the project team. This resulted in a trail showing the team's collective learning. It linked insights from the research phase, to guesses about how people would experience the proposed service concepts and the organisational implications, to findings about how people responded as they interacted with the mock-ups, to revised concepts.
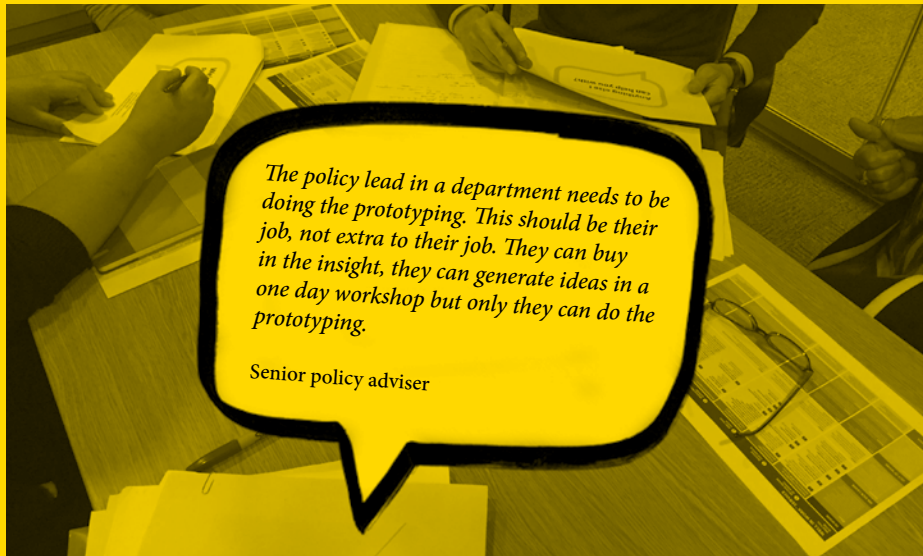
The prototyping validated the concepts and added new perspectives to the team's current understanding of the policy issue and of delivery. For example discussing the prototypes with people involved in service delivery surfaced a deeper understanding of some of the challenges and organisational capabilities required for the proposed solutions to work in practice, increasing the likelihood of the idea being deliverable. It allowed the team to revise the proposals and define key design principles. It also supported the civil servants to experience what was involved in exploring people's experiences of services and reflect on the implications for their usual ways of working.

> *I did some one-on-one prototyping and went along with Cat [from Policy Lab] with service users ... "This is a script, this is a service, what do you think?" And I went to a group session, a room full of mental health service users identified by a Job Centre Plus. The one-on-one session was good. The guy was inspirational. It made me realize that there was something fundamental in the system that needed fixing; it wasn't just about a service.*
>
> Senior policy adviser, Department of Health

> *The policy lead in a department needs to be doing the prototyping. This should be their job, not extra to their job. They can buy in the insight, they can generate ideas in a one day workshop but only they can do the prototyping.*
>
> Senior policy adviser

Heuristic to capture learning from prototyping*

We believed that ....   [our guess]
Based on the insight that .....   [from our research]
We observed that ...   [by seeing how people engaged with the prototype]
From this we learned ...   [our learning]
Therefore we will ....   [our next steps]

...Proto-policies

What do you get from prototyping?
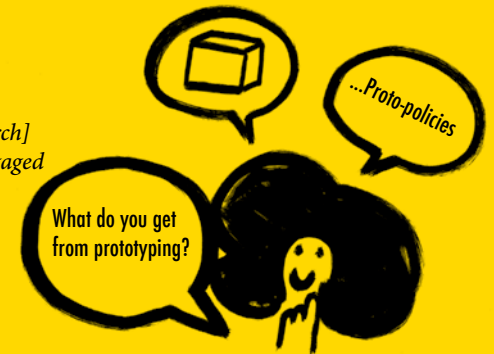
> *You should think about prototyping before you start thinking about piloting. Prototyping is not an alternative to piloting. It helps you build a better specification for what a pilot might be. It may even help you see that your idea isn't going to work and save you the time and cost of a pilot.*
>
> Nesta/Think Public, Prototyping Framework

*Adapted from Alex Osterwalder, Yves Pigneur, Greg Bernarda, and Alan Smith, Value Proposition Design: How to Create Products and Services Customers Want, 2014

Finding 4

The policy profession is shifting from being hierarchical and closed to being networked and open. Policy Lab stages occasions and spaces in which people from inside and outside of government are able to participate in new ways in the activity of policy making.

The Department

Evidence
-Recognize and engage the right internal and external expertise and understand their contribution
-Draw on a wide range of inputs from the earliest stages of a policy cycle
-Understand the digital tools available to broaden the conversation

Politics
Support effective cross-government decision-making

Delivery
Develop sound policy, fast, in a public and political arena, and convert this policy into robust deliverable plans at whatever stage the policy is at, using creativity and confidence

Civil Service Learning, Policy Profession Skills and Knowledge Framework, 2013

Policy makers work closely with people with expertise in their policy area who might be other civil servants, voluntary or community organisations or service providers and delivery partners. The Open Policy Making agenda promotes broadening the range of expertise and inputs involved in policy making and trying out new ways of doing it. It also includes working more effectively across government and with other specialists inside government and increasing the level of contestation during policy development.

I had a bank of people here from all the relevant departments to respond to issues that were raised, and then you had all the NGOs sitting there in the audience. It was fine in that they thought their voices had been heard, but it was so adversarial. It was not a rich discussion. And what it meant was they all got out their thoughts and concerns, the departments deployed their lines, a conversation had been had. But neither side was closer to something being agreed. Whereas actually, with some of the issues, we would love for NGOs to understand why something isn't going to work, or why we genuinely can't make something happen – so that they as NGOs could focus their demands more narrowly, and say "Well these three things you could do". We didn't create the space where people could understand there were limits to what we were doing. Would I be brave enough to do that very differently? Maybe actually. That would be interesting.

Deputy Director, Ministry of Justice

We've had five years of policy makers coming to Cambridge and I've never seen a policy change. In science we have built in scepticism about our own ideas. But the civil servants keep saying it's about the art of the possible and balancing interests.

Researcher, Cambridge University

Have the challenger in first. Rather than right at the end. At the end you're really proud of what you've done, you've got your white paper, and if someone [with the expertise to challenge] … comes in at the beginning rather than the end that can be quite helpful. So do we want to penalise people for speeding, or do we want to reward people who the data shows never speed? … different ways of thinking of problems.

Permanent Secretary

We decided not to have users present at the workshop. The policy lead was worried about developing policy in a safe space. The stakeholders are able to follow Chatham House rules but the users would be directly affected by some of the things people might talk about.

Senior policy adviser, Policy Lab

Of course we consult with stakeholders. But we have to work out what we think first

Are the right people here?

1000 ideas in 1 hour

Who are the right people?

We work in teams all the time

The Policy Lab guys are assuming everyone is willing to participate in a creative, collaborative process. That's often not the case. People sit there and lock the conversation down.

Head of Policy Profession

Policy Lab creates spaces and occasions when people can explore issues and generate ideas collectively at an early stage, when problems and possible solutions are relatively undefined. Activities such as insight sharing workshops make interpreting evidence a collective responsibility. Co-design workshops invite people to collaborate in small teams to create and share ideas expressed in physical models, drawings or role play.

Existing hierarchies are temporarily flattened since many participants do not feel they have the right visual or creative skills – it's equally new to most of them. While some participants find such ways of working challenging or unproductive, skilled facilitators enable participants to engage meaningfully with the activities and become open to one another in the workshop setting.

In a workshop it took a little while to warm up and get used to each other so you do need the time. The ice breaking was not heated but you can tell that people have different agendas – I had an agenda. But it was only when we had the products and we had gone though the process together that we realised that the original attempt at agenda setting was futile.

Policy adviser, Department of Health

There should be more of this kind of thing in government and policy making because it allows young people especially to pitch their ideas and … give a sort of solution that they'd be interested in and would like to get involved in… It will only be a success if some sort of product comes out of this meeting, where we are given feedback that something tangible has come out of us meeting here.

Policy Lab/Cabinet Office Youth Policy team workshop participant

Who's in the room is the most important question.

Andrea Siodmok, Policy Lab

Policy Lab's approach is informed by participatory design. This is an R&D field that developed in Scandinavia in the 1980s, based on the idea of involving people who would be the future users of a new software system in its design, for example by working with members of trades unions. The approach is now used in many contexts including social innovation and service design. In participatory design, a range of people are invited to become active participants in the innovation journey and have access to the tools that experts use. They become co-researchers and co-designers exploring and defining the issue, and generating and prototyping ideas. Together participants explore not just the future thing being designed, but the systems of support and activities that underpin it.

The tradition of participatory design recognises that designing is not neutral. It involves making decisions about who is invited to participate, how participation is enabled, which tools are used, and how the outcomes of such an activity shape what goes forward.
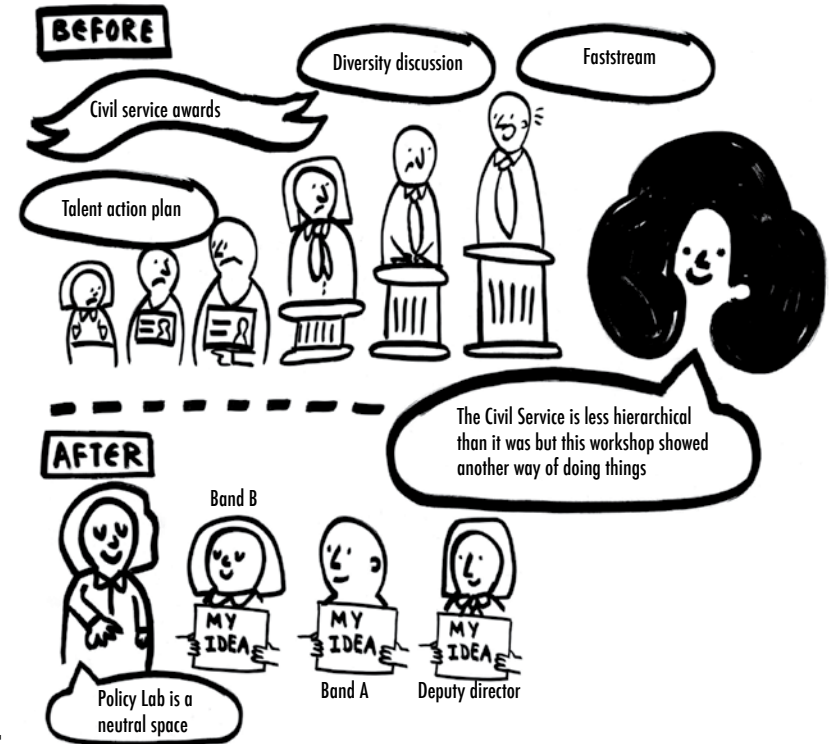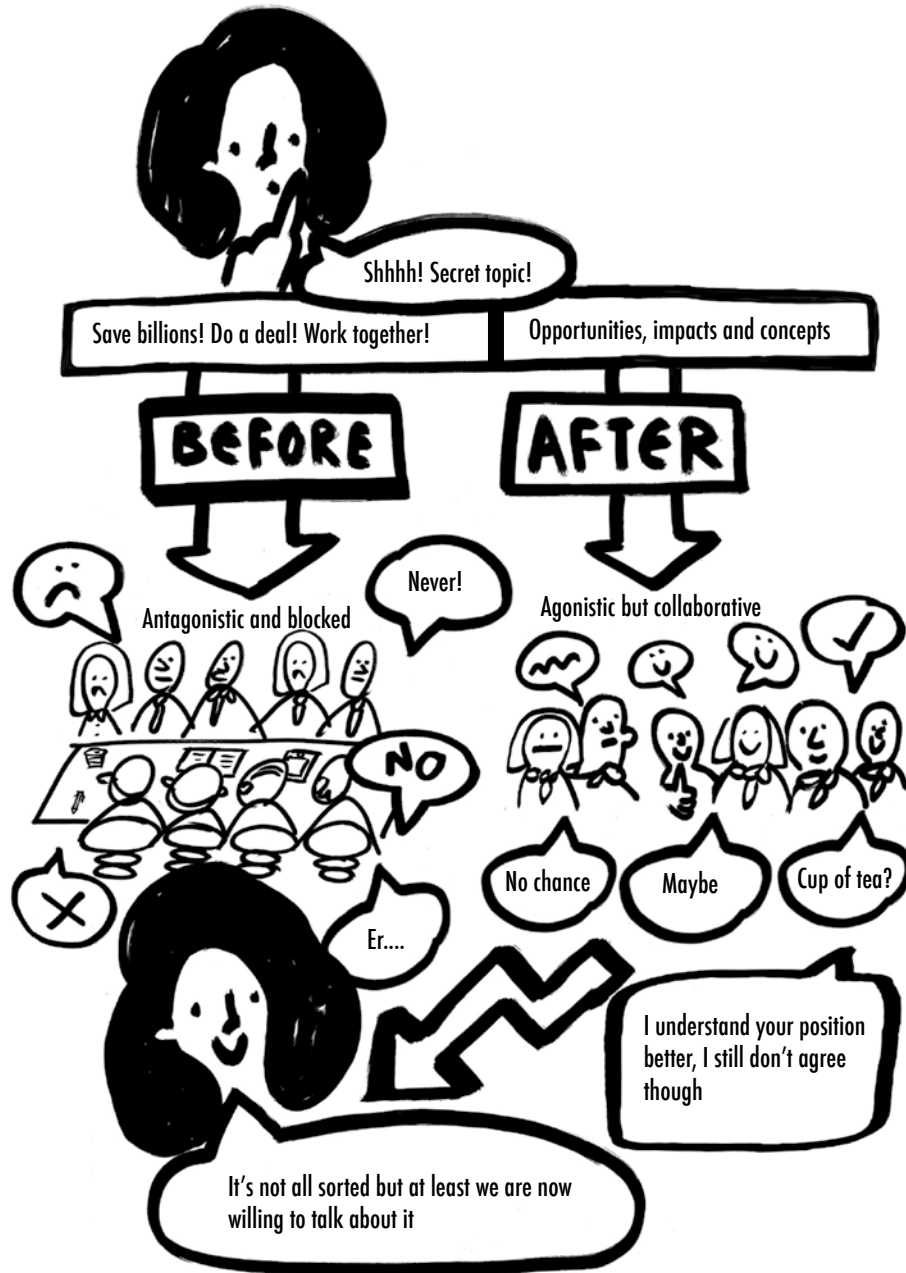
A Policy Lab project or workshop does not to force a consensus to emerge at an early stage. This approach is based on all participants being invited to be active participants in a collective inquiry going through a learning journey together (see Finding 1). It is agonistic* rather than antagonistic – making space for difference and recognising that there are potentially positive outcomes from surfacing and acknowledging some kinds of conflict. Skilled facilitation pays attention to the practical organisation of participation and how this is supported and staged.

On the one hand, Policy Lab supports the activities of civil servants whose work is formally separated from politics by their job being to help ministers achieve their purposes. But on the other, its approach surfaces some of the micro-politics that exist in the work of opening up participation.

> *Policy Lab got sufficiently senior people in the same room without their baggage. It humanised the problem – it made people see there was a common perspective on the problem. The approach revealed and broke down barriers we didn't even know existed. And it gave us a shared language we could use. We thought we had one – but we didn't. The environment enabled people to forget the constraints of their departmental hats/ positions/ hierarchies. It broke the existing mindset.*
>
> Adviser, Department of Heath

I was really impressed with [the service providers] who don't have the opportunity to think about the bigger picture … [In the Policy Lab workshop] they were enthusiastic and engaged and able to take on our policy problem and help us out with it, even though some of the things that were being suggested might have an adverse effect on their service. But they were able to see it from a much bigger picture and not just about them.

Deputy director, Ministry of Justice

*Chantal Mouffe, 1999, Deliberative Democracy or Agonistic Pluralism?, Social Research, 66(3)

Case study 4

Enabling distributed creativity

Policy Lab draws on a range of methods, tools and techniques which support creativity among civil servants and enable collaborative interactions with people affected by policy issues, stakeholders, experts and partners. Its workshops and short projects give civil servants opportunities to explore using particular methods and tools in a low risk context. Longer projects combine several methods and provide ways for policy officials to develop their familiarity with and expertise in using them.

Involving lots of people in idea generation in parallel

Figure 19.

Building on the examples of "unconferences", GovJams and other formats, Policy Lab has designed and facilitated events that support a diverse group of people to come together to generate solutions collectively in relation to policy challenges. In October 2014 Policy Lab supported the (then) Deputy Prime Minister's office to engage with 192 people via eight concurrent "ideas days" to generate ideas to support a thriving north of England in 2030. The outputs included concepts for new programmes, services, organisations and infrastructure, which were shared via short videos and by discussion on an online platform. This in turn shaped a one-day summit showcasing new policy proposals.

This model was then built upon to support UK Trade & Industry during summer 2015. Policy Lab and its network of facilitators and designers helped UKTI's Ideas Lab hold nine simultaneous "policy jams" across the UK – linked up to embassies and consulates around the world – in which exporters collaborated to propose new ways to "make export effortless" for British businesses.

Figure 19. Participants in a workshop created a visual map of assets and resources in the region to build a shared understanding

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Foregrounding the visual, material and narrative

Policy Lab workshops typically emphasize the visual, material and narrative aspects of day to day life. For example inviting a group of policy officials from the Cabinet Office to draw rather than speak their ideas enabled participants to work in a different way. Since few civil servants claim to have expertise in drawing, this equalised participants and enabled them to share and build on each other's ideas.

I think most people are used to doing brainstorming of some kind, and as a team we would do that quite regularly, so I don't think that in itself was a particularly new way of working … But then it was actually quite effective and powerful. Particularly for a couple of members of the team who are not very comfortable speaking out in a group, it was a good technique as it allowed them to use visuals and write things down. We found it to be effective.

Deputy director, Cabinet Office

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Visualising speculative futures

Policy Lab supported the Government Office of Science to try out a new approach as part of its work on the future of ageing. The resulting project involved consultancy Strange Telemetry creating a series of images showing possible future scenarios for work, services and transport in 2040 and facilitating discussion around people's reactions to them. This resulted in new insights about what people thought might matter in the future.

Figure 20.

[T]hese methods take on the deliberate assessment of certain future scenarios, acting both as a form of public engagement and a means of capturing public responses – enthusiasm, reluctance, insight – in a way which is legible to policymakers.

Georgina Voss, Tobias Revell, and Justin Pickard, Speculative Design and the Future of an Ageing Population Report 2: Techniques, 2015

Figure 20. Discussing visualisations showing future scenarios. Photo by James Davies, courtesy Swansea University

Sharing design methods and tools

Policy Lab has tried out and adapted a range of tools and methods for use in policy contexts. By sharing some of these inside government and with wider publics via Slideshare*, the team is contributing to the building up of expertise. It is also actively shaping the international conversation about design approaches in policy.

John Thackara
@ johnthackara

What design tools are being used by governments? These @PolicyLabUK slides are clear and helpful http://www.slideshare.net/...

5   7

Tweeted on August 24th

*http://www.slideshare.net/Openpolicymaking/methodbank-and-toolkit-for-design-in-government

Discussion

Making sense of Policy Lab

The previous sections described – by no means comprehensively – how Policy Lab's approach has impacted on the work of policy makers in its first 18 months. Short cases and quotations from participants in Policy Lab's workshops and projects brought this to life. This section steps back from the empirical detail to reflect on these impacts with the help of two academic lenses. It provides concepts that form the basis of a proposed framework against which to evaluate Policy Lab – or other initiatives bringing design-based approaches into policy making – going forward. It also summarises key insights about Policy Lab's impact to date.

Supporting organisational learning by exploring new practices

The first lens comes from the field of organisation studies, specifically the strand that looks at how organisations learn and develop new capabilities. One well-established idea in this literature is to distinguish between how organisations make the most of existing capabilities and how they develop new ones*. Exploitation is about defining and improving routine organisational behaviours to achieve enhanced performance. In contrast, exploration is about experimenting with unfamiliar capabilities and (in the case of businesses) markets and finding out how they can be combined into new routines.

Building on this distinction, other researchers have combined this literature with research into project management to make sense of how projects support organisational learning**. They distinguish between different ways that projects help organisations build capabilities through a dynamic learning process. The first phase is setting up an exploratory "vanguard project" in which an organisation anticipates future developments as it tries out new ways to deal with unfamiliar contexts and activities. The second phase captures "project-to-project" learning across the organisation, making available insights and experiences of participants in the vanguard project to other teams. In the third phase, once a sufficient number of projects have been undertaken, the organisation consolidates its learning from "project-to-organisation". It increases its ability to run many projects in this way, and the new capabilities are increasingly standardised. Thus over time, exploration gradually moves towards exploitation as the organisation develops capabilities, resources and ways of doing things that become increasingly routinised.

Figure 21.

Exploitation — Exploit and strengthen dominant ideas and capabilities

Exploration — Explore and develop new ideas and capabilities

Manage transitions between exploration and exploitation

Viewed through this lens, Policy Lab can be seen as a vanguard project that supports the Civil Service to explore new expertise and ways of doing things which are not yet routine or ready to be scaled. The Civil Service Reform agenda identified capabilities the organisation needed to develop. Among the strands of activity that led from this, Policy Lab was set up to enable officials in departments try out new tools and techniques in policy making.

Policy Lab has successfully demonstrated that the approach and methods associated with ethnographic research, design (thinking) and service design can be used within central government in relation to live policy issues. Policy Lab has helped the policy profession explore what such methods bring to the day-to-day work of policy officials and others they engage with, resulting in positive impacts from the perspective of these participants. The next phase of work is to develop project-to-project learning so that their insights and experiences can be shared with other vanguard projects and other teams.

But as the findings and cases indicated, in addition to supporting the work of policy makers, the approach and methods raise questions about what could, or should, be involved in their work. By exploring and helping articulate new practices, Policy Lab opens up questions about contemporary policy making in the context of complexity and uncertain futures. To discuss this requires borrowing another academic lens.

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* James March, 1991, Exploration and exploitation in organizational learning, Organization Science, 2(1).
** Tim Brady and Andrew Davies, 2004, Building project capabilities: From exploratory to exploitative learning, Organization Studies, 25(9).

Figure 21. Adapted from Niklas Arvidsson and Ulf Mannervik. 2009. The Innovation Platform: Enabling Balance between Growth and Renewal.

Being helpful, creating new hybrids and offering useful challenges

The second lens that helps make sense of Policy Lab's impact comes from social studies of science and technology. In a study of interdisciplinarity, which analysed the encounters between different fields of knowledge and practice, researchers identified three ways that disciplines engage*. In service mode, one field (eg design) supports another (eg policy making) by providing expertise such as creating visualisations of people's journeys in relation to government or other services. In partner mode, two or more fields integrate to combine resources resulting in new hybrid ways of doing things. In challenge mode, one discipline's way of approaching problems and solutions calls into question the assumptions, claims and methods of another.

The researchers also identified three logics or rationales within which these modes play out, adapted here for this discussion of Policy Lab. The first rationale is accountability – the idea being that using an approach such as participatory design will help policy making to become more accountable to its publics. The second is the logic of innovation – the idea that new kinds of expertise and novel solutions will only come about by going beyond existing ways of doing things. The third is reordering – the idea that what a field is made up of and concerned with may be changed in the interactions with other specialisms. An example of this is the idea of putting user needs first, as advocated by the Government Digital Service** and by some government ministers.

In Policy Lab's projects these modes and rationales can exist in parallel. They help identify what is going on in the different ways that Policy Lab helps policy makers mediate between politics, evidence and delivery. For example during the health and work project described in case 1, Policy Lab partnered with the two departments it worked with. It took the lead on organising and facilitating the project but worked closely with the departmental policy leads to design and resource the project resulting in a new hybrid. The policy sprint workshop enabled a mixed team including policy makers, analysts, designers, specialist researchers and stakeholders to explore existing evidence and gaps in it in the context of a collective inquiry into the issue. Later, by working with policy makers and analysts with the support of specialist designers, Policy Lab developed ways to carry out and learn from early stage prototyping (see case 3), shaped by the logic of innovation. By involving people with health conditions and those who work with them such as doctors and employers, Policy Lab practically involved people in doing things differently.

It also serviced both departments. Policy officials and analysts wanted to use the project to get a better understanding of people's experiences of having a health condition and being out of work

or at risk of leaving employment. The project was designed to deliver this by commissioning research. Two sets of insights resulted from the research using ethnographic and data science techniques (see case 2). By sharing these findings including via a participatory insight-sharing workshop and by regularly referring back to them in different ways, Policy Lab kept the insights live and visible in the project. By discussing and referencing the findings as policy ideas developed, the civil servants become accountable to the evidence, in the logic of accountability.

In addition there were moments of challenge. For example during the project's kick off workshop, one participant, who works for a Job Centre Plus supporting people looking for work, posed the question: "What is good work?" This question prompted participants to step back and consider from whose perspective the project was being run and its ultimate purpose. For policy makers, the locus of activity is usually the minister in their department shaped by the rationale of accountability to the rest of government and to voters. But asking this question resulted in a re-ordering of what matters. Focusing on "good work" rather than "new government services" or "reducing costs" gave a different starting point – the worlds of people as they experience things, not of government.

Conclusion

This brief discussion has highlighted that Policy Lab's activities are not just about using new tools and techniques, although these are important. The first academic lens drew attention to how Policy Lab supports organisational learning by exploring unfamiliar areas, which is the basis of developing new capabilities which can later be routinised and exploited. The second lens offered different ways of thinking about what the Policy Lab approach offers to policy making by working in different modes shaped by different rationales. This analysis goes beyond the everyday description of the Policy Lab "offer" to departments. It reveals that in addition to being practically helpful, Policy Lab creates new hybrids with its project partners inside and outside of government, and at times offers useful challenges.

Thus as well exploring what new policy making capabilities might be, Policy Lab problematises policy making – and this could be a significant part of its contribution. Tools and skills do not exist in a vacuum ready to be ported from one context (such as business innovation) into another (such as policy). They bring with them assumptions and norms, the hidden aspects of ways of doing and knowing things that are shared among participants in a culture. So what's as interesting in Policy Lab's work is the subtle interventions it has made into policy making culture alongside its enabling of it. These are summarised in the box.

Instead of offering an evaluation of Policy Lab that smoothes away the complexity, this report has opened things up. This is often the way with academic work in the arts and humanities. The study foregrounded some of the material and experiential aspects associated with developing new kinds of practice. The report has done this too in its graphic design and illustration, and also in terms of the research literatures it draws on. It has shared some ways that Policy Lab has been discovering different ways to do policy making. Policy Lab's discoveries have shown that design approaches can make significant contributions to the way the Civil Service learns as an organisation and to articulating the new practices it needs to develop to face complex policy challenges. It's now up to senior civil servants to take this remarkable initiative forward.

Key insights

Policy Lab uses an approach and expertise based in design to help the policy community explore and develop new capabilities in generating and interpreting early-stage insights, engaging with delivery partners, specialists and stakeholders, and closing the delivery gap between policy intent and outcomes.

As well as practically servicing teams on live policy issues, Policy Lab works with departments to develop new hybrid ways of working and to challenge existing ways of doing things in the ongoing mediation between politics, evidence and delivery.
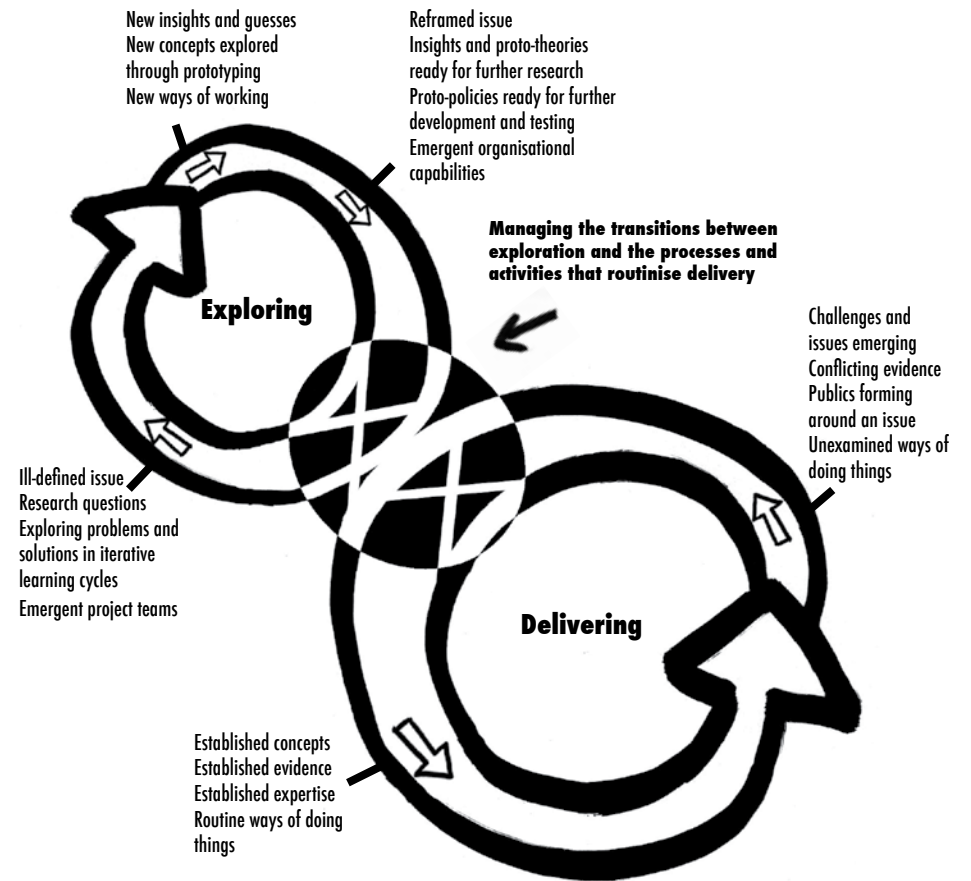
Policy Lab's projects engage a range of people in collective exploration of a policy issue, through which problems and solutions co-evolve in iterative learning cycles.

This approach helps discover and build confidence in plausible insights and concepts that can then further developed and exploited by more conventional means leading to improved delivery and more likely impact.

Insights and concepts generated through this approach reorder what matters, by bringing into view the complexity and lived experiences of people affected by or involved in a policy problem, rather than starting with the existing system.

The approach enables people inside and outside of government to collaborate effectively by enabling more equal participation, generating a shared language and approach and acknowledging difference constructively.

Policy exploration framework

New insights and guesses
New concepts explored
through prototyping
New ways of working

Reframed issue
Insights and proto-theories
ready for further research
Proto-policies ready for further
development and testing
Emergent organisational
capabilities

Managing the transitions between exploration and the processes and activities that routinise delivery

Exploring

Challenges and
issues emerging
Conflicting evidence
Publics forming
around an issue
Unexamined ways of
doing things

Ill-defined issue
Research questions
Exploring problems and
solutions in iterative
learning cycles
Emergent project teams

Delivering

Established concepts
Established evidence
Established expertise
Routine ways of doing
things

Policy Lab supports policy makers in government departments to explore and generate solutions to issues and develop new capabilities

Civil servants balance their work between exploring issues and generating possible solutions and delivering solutions and capabilities at scale

Methodology

This fellowship took an exploratory approach rooted in organisational ethnography*. The research was informed by existing research in design studies, systems design, participatory design and some work in organisation studies. During the fellowship I spent about three days a week embedded in the Policy Lab team in the Cabinet Office. My participant observation included helping prepare, deliver, record and reflect on the team's ongoing activities such as workshops, formal and informal meetings, public events and presentations. This included participating in several longer-term projects with government departments, as well as interviews and visits to other initiatives in the US and Denmark.

My work also included engaging in digital dialogues with members of the team, its partners and others via email and Twitter. I participated in the wider community of interest via the Twitter hashtags #psilabs #servicedesign and #designthinking and in the LabWorks 2015 event. During the second half of the year I developed frameworks in collaboration with Policy Lab staff, which I iterated in response to feedback from civil servants in central and local government and with other researchers. I wrote occasional blog posts on researchingdesignforpolicy.wordpress.com and contributed to the Cabinet Office's Open Policy Making blog. I also had access to data gathered by BOP Consulting for the evaluation of Policy Lab. My research was informed by the principle of informed consent, for example introducing myself as a researcher at meetings and explaining how the data would be used.

Acknowledgments

Glossary

Abductive reasoning
Making guesses and imaginative leaps from incomplete evidence and evaluating them on the basis of plausibility before moving to deduction and induction

Co-design
Involving people with relevant (often first-hand) experience of an issue in generating and exploring potential solutions to it

Data science
Using analytical techniques from statistics, computing and other fields to create insights from and identify patterns across large data sets

Design
Combining creativity and analysis via iterative cycles to explore issues and generate solutions, viewed through the lenses of how people experience things and what resources are involved, in order to achieve outcomes

Ethnography
Researching how other people experience life by trying to experience it with them and create accounts of it that are truthful to them

Experience
How people encounter and interact with their environment and participate in society through their bodies, minds and symbolic structures

Insight
A realisation grounded in observation and interpretation considered against existing knowledge

Policy maker (or official)
A civil servant who helps a minister (elected politician) achieve their policy intent

Prototyping
Exploring to what extent a proposed solution fits with existing cultures, activities and ways of doing things, and to what extent it changes them

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Dan Neyland, Organizational Ethnography, 2007

Further reading

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Further doing

@PolicyLabUK
http://www.slideshare.net/Openpolicymaking/methodbank-and-toolkit-for-design-in-government
https://openpolicy.blog.gov.uk

Lucy Kimbell
@lixindex

Which publications would you recommend to a civil servant wanting to learn about #designthinking #servicedesign #UX #design #psilabs?

⟲ ⇄ 9 ☆ 15

Tweeted on August 19th

Kathryn Grace
@IamKathrynGrace

@lixindex Rather than read I'd recommend they try #learningbydoing Get along to #GSusJam this October or #GSJam or #GGovJam #servicedesign

⟲ ⇄ 1 ☆ 2

Tweeted on August 19th

About the author

Lucy Kimbell is director of the innovation insights hub at University of the Arts London and was previously principal research fellow at the University of Brighton. Since 2005 she has taught design thinking and service design on the MBA at Said Business School, University of Oxford where she was previously on the faculty. Lucy's *Service Innovation Handbook* was published in 2014.

@lixindex

About the illustrator

Holly Macdonald is a illustrator and designer, who graduated with a BA Illustration from the University of Brighton in 2015. She specialises in political and social satire and has been acknowledged by the likes of Sky News and People of Print for her political projects. She is a regular writer for Kollektiv Gallery discussing her experience of graduating and politics. She won a honorable mention for animation at the 3x3 International awards.

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