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FOR GOVERNMENT INNOVATION**

EXPERIMENTATION STARTER KIT

EXPERIMENTATION STARTER KIT

Content

During the past decade, experimentation started to make its way towards the core of government in many countries around the world as a new approach to deliver better outcomes. Experimentation can be described as the unconventional way to tackle difficult and complex issues facing governments today, such as quality of education and health, crime reduction, housing, air quality, and many others.

Experimentation is about systematically testing an assumption, identifying gaps and exploring potential solutions, without allocating too much time and resources.

This experimental approach is not new to the government of the United Arab Emirates; as there are several examples of using experimentation as a tool, in order to foster innovation across many areas in society.

The National Strategy for Advanced Innovation (i.AE), which was announced in 2018, represents an updated version of the National Innovation Strategy. The new strategy seeks to shift the focus towards specific purposes and mission-oriented innovations with the aim of developing an experimental approach to achieve the goals of UAE Centennial 2071.
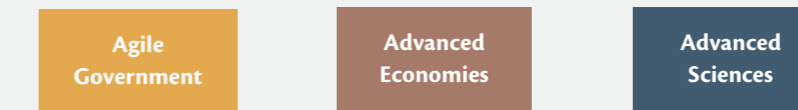
The goal is to build an experimental mindset across the government through shared infrastructure, methodologies and models, not only to promote new and innovative ways to tackle challenges and come up with policies, , but also to test them in real life more rapidly.

National Strategy for Advanced Innovation Framework

3. Human-centric Purposes

| Discovery | Life | Wellbeing | Education & Future Skills | Technology for Humanity | Mobility | Green Power |

2. Global Influencers

| Agile Government | Advanced Economies | Advanced Sciences |

1. A Mindset that Encourages Experimentation and Testing

| Creating | Connecting | Learning | Calculated Risk-taking |
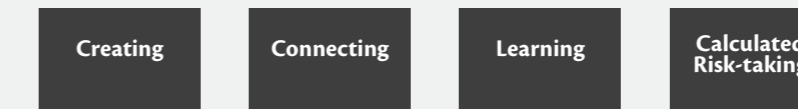
There is not one single definition of experimentation and it is often suggested that it is a tool that supports the process of rapid explorative work and assists in identifying the most viable initiatives for positive impact. Experimentation helps the idea to move from ideation phase to validation and testing phase before any large-scale implementation.

In other words, experimentation is a vehicle that drives you forward. It allows you to perfect an idea through evidence while moving towards solutions.

Generally there are three characteristics for experimentation

It is
a temporary
activity
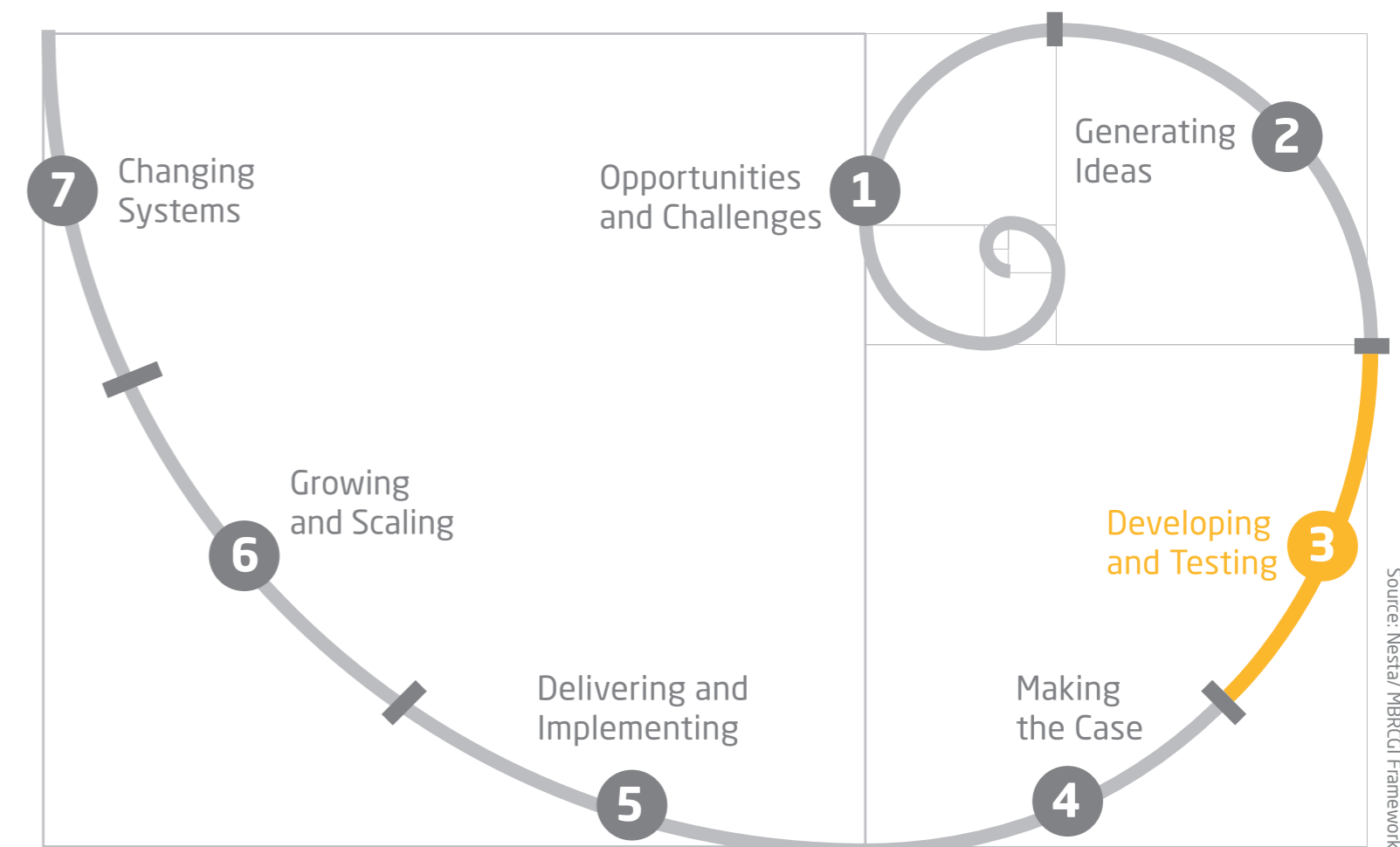
+

It has
limited
scope

+

It produces
tested and
evaluated
results

Experimentation is a stage in the Innovation Spiral

Many innovative initiatives fail early due to the fact that there was no experimentation. Either there is a rush to scale prematurely or ideas remain as ideas.

On many occasions, people tend to jump from stage 2 to stage 4 on the innovation spiral, resulting in higher risks of failure across all stages that follow.

Developing and testing an idea (stage 3) is crucial to understand the potential impacts of the idea and helps minimize the risks. Additionally, the path becomes clearer and any gaps can be filled prior to the implementation of any solutions or new policies.

7 Changing Systems

1 Opportunities and Challenges

2 Generating Ideas

6 Growing and Scaling

3 Developing and Testing

5 Delivering and Implementing

4 Making the Case

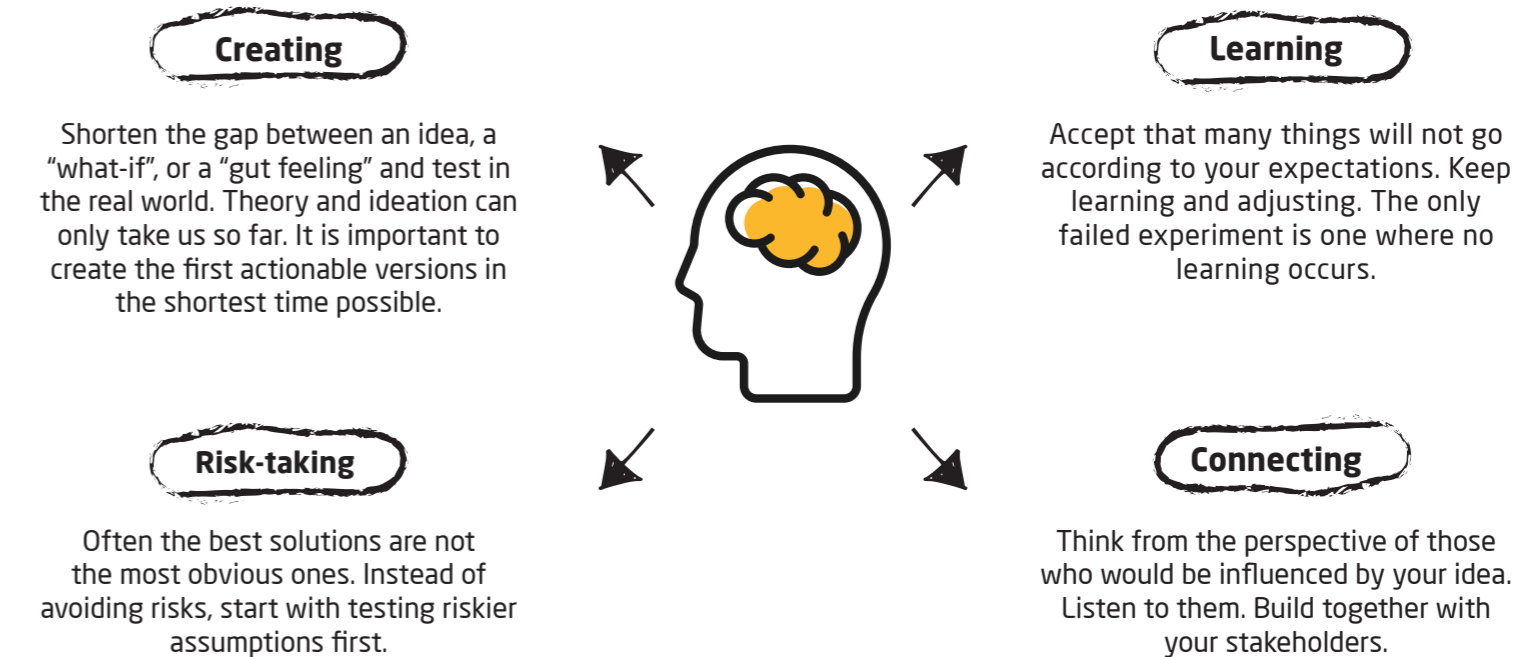Source: Nesta/ MBRCGI Framework

There's no innovation without experimentation

14

15

Experimentation turns uncertainty into managed risk

Experimentation allows us to test solutions and identify what works and what doesn't. In case of solutions that do not work, the experimental approach helps minimize the probability of failure and maximizes the likelihood of success.

Moreover, experimentation gives us the ability to be flexible, making it easier to change direction if needed and encourages us to quickly try out new and radical ideas. It also gives us the space to fail and learn from failure, without having to worry about the consequences.

Experimentation is a mindset

Creating

Shorten the gap between an idea, a "what-if", or a "gut feeling" and test in the real world. Theory and ideation can only take us so far. It is important to create the first actionable versions in the shortest time possible.

Learning

Accept that many things will not go according to your expectations. Keep learning and adjusting. The only failed experiment is one where no learning occurs.

Risk-taking

Often the best solutions are not the most obvious ones. Instead of avoiding risks, start with testing riskier assumptions first.

Connecting

Think from the perspective of those who would be influenced by your idea. Listen to them. Build together with your stakeholders.

An experimentation mindset makes innovation more than possible, it makes it credible!
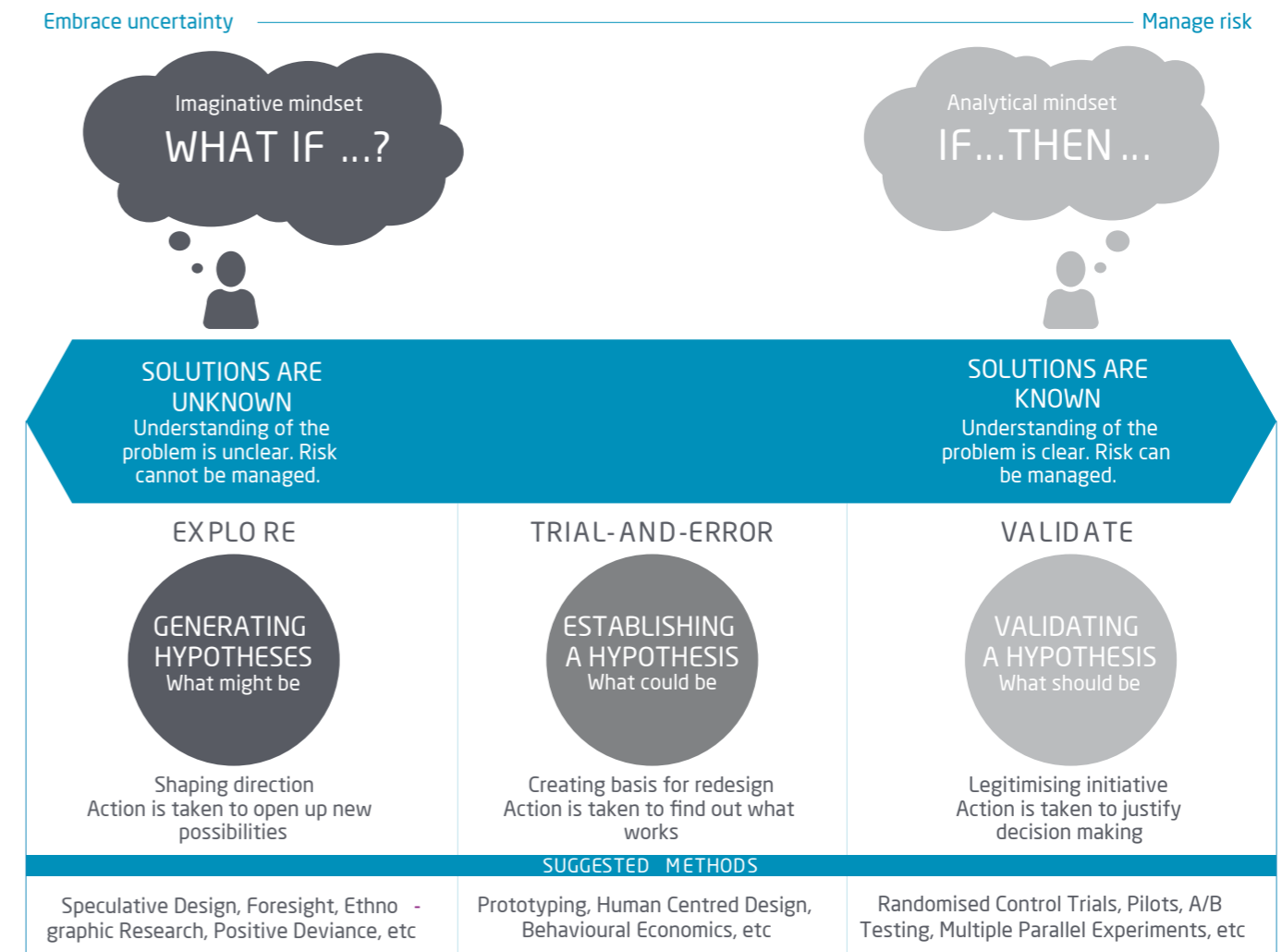
The experimentation spectrum (Experimentation is a continuum)

The Experimentation Spectrum demonstrates the three different approaches used for experimentation: Generating Hypotheses, Establishing a Hypotheses and Validating a Hypotheses.

When solutions are unknown, an imaginative mindset "What if" is required, as can be seen on the left side of the spectrum. Here, experiments aim to explore options and generate new thinking.

At the other end, where solutions are known, an analytical mindset is required and the focus is on validating or justifying decision-making.

The middle approach, Trial and Error, builds on both mindsets and the process here involves testing existing assumptions in order to understand the potential solutions and any unanticipated effects.

Embrace uncertainty ──────────────────────────── Manage risk

Imaginative mindset
WHAT IF ...?

Analytical mindset
IF...THEN ...

SOLUTIONS ARE UNKNOWN
Understanding of the problem is unclear. Risk cannot be managed.

SOLUTIONS ARE KNOWN
Understanding of the problem is clear. Risk can be managed.

EXPLORE	TRIAL-AND-ERROR	VALIDATE
GENERATING HYPOTHESES What might be	**ESTABLISHING A HYPOTHESIS** What could be	**VALIDATING A HYPOTHESIS** What should be
Shaping direction Action is taken to open up new possibilities	Creating basis for redesign Action is taken to find out what works	Legitimising initiative Action is taken to justify decision making

SUGGESTED METHODS

Speculative Design, Foresight, Ethnographic Research, Positive Deviance, etc	Prototyping, Human Centred Design, Behavioural Economics, etc	Randomised Control Trials, Pilots, A/B Testing, Multiple Parallel Experiments, etc

Adapted from Christiansen, Leurs & Quaggiotto (2017)

Source: Nesta/ Playbook

Experimentation is learning-centered

Culture is about ideas, customs and the social behaviour of people. Organisational culture can never be changed overnight. However, it is possible to help an organization shift it's culture from the traditional methods to an experimental approach by focusing on one central enabler: learning.

There are three learning oriented actions:

1 Safe space for learning: Experimenters need to feel safe to express unconventional ideas without criticism. Unconventional ideas might not always succeed, but making space for them can unleash unique thinking.

2 Learning with action: Moving towards an experimental culture is essentially about changing how ideas are created and how people behave and interact with each other. The actions and interactions of people can encourage bold thinking and doing.

3 Systemizing learning: Experimenters need to be able to talk openly about failures in order to ensure learning and progress. If such experiences are discussed, and learning from them is encouraged, we will have information at our use, which we would have never had without the original failure.

Experimentation is a tool

More than anything else, experimentation is a faster learning method. Traditional planning is not enough for operating in today's world, faster ways for learning are needed. Conducting more experiments helps our decision-makers, inventors, entrepreneurs, and leaders to interact with citizens and the global community: not only by listening to them, but also by developing a better society together with them.
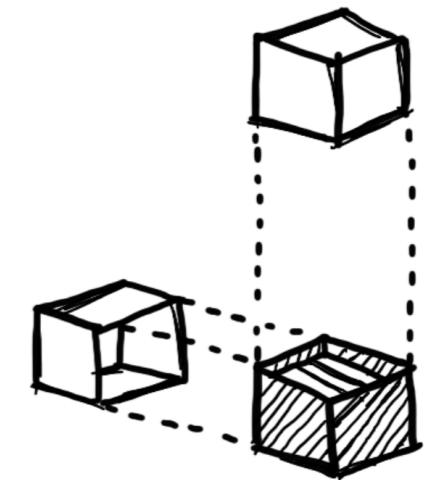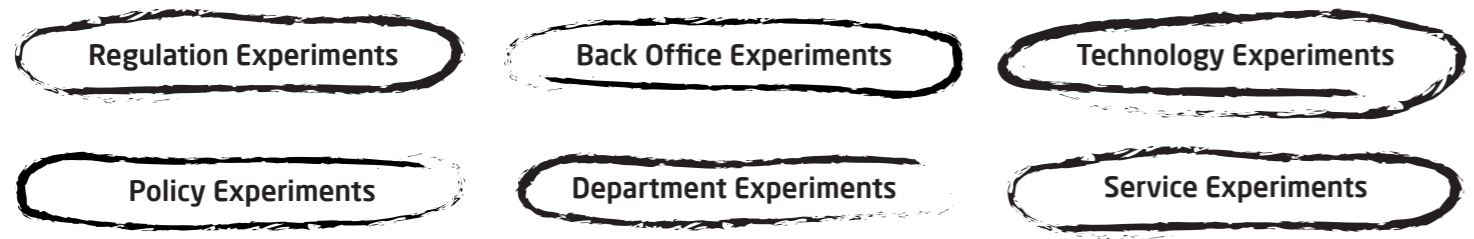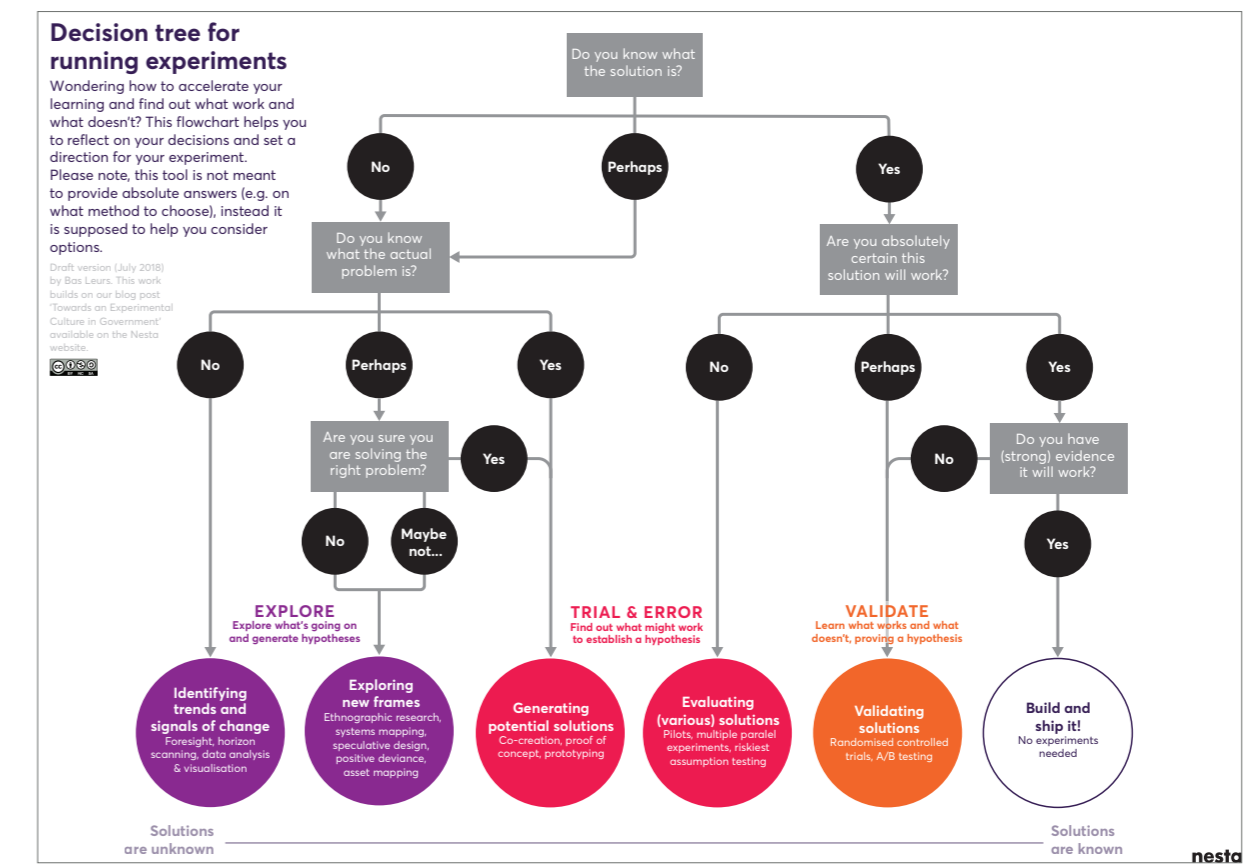
Experimentation can be applied to explore new ideas, framed as hypotheses and assumptions

Here are some examples of experimentation types:

- Regulation Experiments
- Back Office Experiments
- Technology Experiments
- Policy Experiments
- Department Experiments
- Service Experiments

Yet, not everything is or should be run as an experiment, especially if you do not know what the problem is in the first place, or you have nothing to compare your solution with. It may be necessary to collect more data before starting to experiment. If there is no meaningful data for example on road-related accidents, it is hard to start creating hypotheses about how to reduce accidents and start testing them.
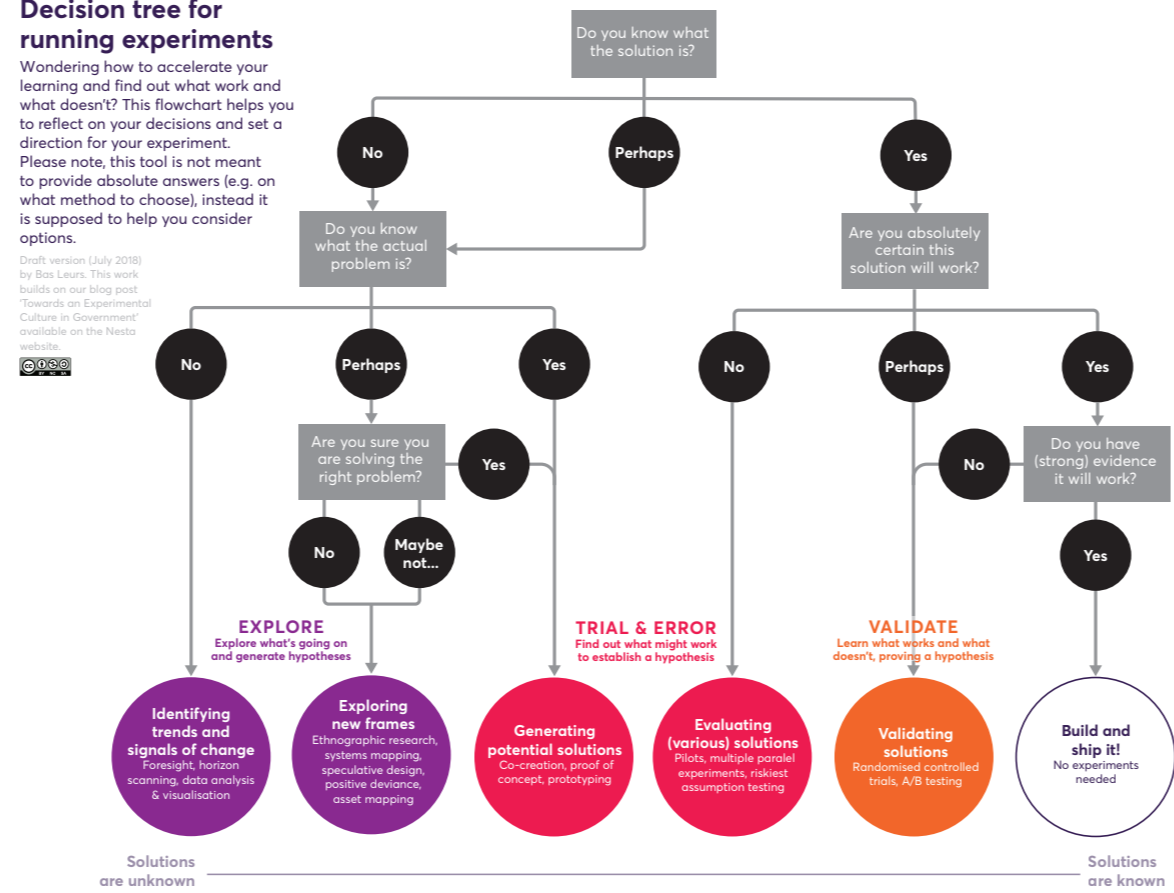
The following decision tree diagram helps to explore the different types of learning required depending on your context.

Decision tree for running experiments

Wondering how to accelerate your learning and find out what work and what doesn't? This flowchart helps you to reflect on your decisions and set a direction for your experiment. Please note, this tool is not meant to provide absolute answers (e.g. on what method to choose), instead it is supposed to help you consider options.

Draft version (July 2016) by Bas Leurs. This work builds on our blog post 'Towards an Experimental Culture in Government' available on the Nesta website.

EXPLORE
Explore what's going on and generate hypotheses

TRIAL & ERROR
Find out what might work to establish a hypothesis

VALIDATE
Learn what works and what doesn't, proving a hypothesis

Identifying trends and signals of change
Foresight, horizon scanning, data analysis & visualisation

Exploring new frames
Ethnographic research, systems mapping, speculative design, positive deviance, asset mapping

Generating potential solutions
Co-creation, proof of concept, prototyping

Evaluating (various) solutions
Pilots, multiple parallel experiments, riskiest assumption testing

Validating solutions
Randomised controlled trials, A/B testing

Build and ship it!
No experiments needed

Solutions are unknown

Solutions are known

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Do you know what the solution is?

No — Perhaps — Yes

Do you know what the actual problem is?

Are you absolutely certain this solution will work?

No — Perhaps — Yes

No — Perhaps — Yes

Are you sure you are solving the right problem?

Yes

No

Do you have (strong) evidence it will work?

No — Maybe not...

Yes

EXPLORE
Explore what's going on and generate hypotheses

TRIAL & ERROR
Find out what might work to establish a hypothesis

VALIDATE
Learn what works and what doesn't, proving a hypothesis

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Solutions are unknown ———————————————————— Solutions are known

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Experimentation is a tool for creating the future we want

To support effective experimentation, this section guides you through five key questions: why, what, when, who and the how of every experiment.

Why
do you want to
experiment ?

What
do you want to
experiment on ?

When
should the
experiment
start and finish ?

Who
do you need
to run the
experiment ?

How
will you run the
experiment ?

Why
do you want to
experiment ?

The current policy climate is ripe for experimentation. In a time of increased pressure on public services to meet the demands of people, we need to find what works by 'testing in real world situations rather than paper development followed by national implementation.

It is important to be clear of the reasons that are driving your use of experimentation.

1 As stated in the introduction "learning mindset", more specifically, it is important to approach experimentation from a learning mindset rather than a success mindset.

2 The purpose of experimentation is to search for what works and what does not. It is often counterproductive to have a fixed mindset to prove that your idea or initial hypothesis is successful, as this creates all sorts of blind spots, from not testing the riskiest assumptions to not truly listening to the evidence.

3 Experimentation can be considered as a tool is to de-risk any new idea or solution.

4 In experiment design and rapid execution, initial assumptions about challenges can be proven wrong. When designing experiments, early engagements with stakeholders and tests can reveal new, even unexpected information about the challenges and so they can be re-defined in the light of this new information. This is why it is crucial for Experimentation teams to keep an open mind concerning the form and nature of the challenges.

5 Experimentation offers a path to make fast rapid progress. All too often, executive sponsors, those with the budget and decision making, are less likely to approve of new initiatives and projects due to inherited biases, risk avoidance, and need for evidence driven decision-making. Experimentation addresses all three, offering small wins, building initial momentum and inviting the sponsors to join the journey.

6 Experimentation helps governments accelerate innovation, create human-centered policies and quickly learn how well policies and services work. Experimentation also reduces risks for growing and scaling as it involves testing what works. At best, experimentation enables radical innovation due to opening a safe space for learning.

7 Without experimentation, feasibility of ideas is left untested which leads to governments wasting resources into programs, services and other activities that do not work. Countries around the world are actively beginning to explore new ways to start using experimentation as a tool in their public sector work.

What
do you want to
experiment on ?
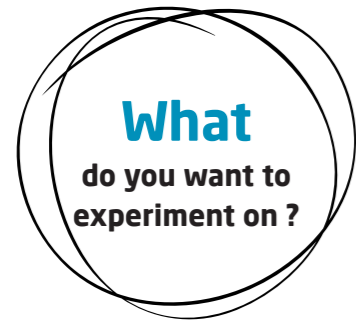
Recent years have seen a growing interest and increasing uptake of experimental methods in government. Around the world, we see a growing number of governments taking up experimental approaches to tackle complex issues and generate better public outcomes. Experiments can be done across all sectors on any of the topics; policies, laws, rules and regulations, government services, programs, syllabuses, etc..

If we want effective public services, we need an experimental, learning government – robustly and systematically testing things out, measuring them and growing what works. Without experimentation, government stagnates and we cannot afford business as usual in the face of the immense challenges to adapt to ageing populations, climate change and fiscal pressures.

In business terms, experimentation is commonplace. Google claims to have run 12,000 randomised experiments in just one year, with about 10 per cent of these leading to business changes. In a recent survey by Nesta of UK internet economy businesses, controlled trials and experiments were the fastest growing analytical techniques used. Experimentation is also mainstream in science, medicine and international development. But it is not routinely used in social policy interventions in the UK.

Breakthroughs in transforming public services only come from a willingness to push boundaries, to take risks and accept failure while learning from it. If the Government services is to play a role in innovating, it is essential that it does so while expecting that failure could occur and that there is room to stop, rethink and change direction, and that when things are not working they will be stopped.

An experimental approach is also vital in moving beyond a static 'evidence-based policy'. Evidence can sometimes only reflect what worked in the past – or in other countries. Focusing on what seemed to work in the past reinforces the status quo. We need to constantly strive for new alternatives and new knowledge to meet current challenges.

Many experiments need to start small, so as to limit cost to a government, in case of a trial failure. The advantage of an experimental approach is that you can be innovative and cautious at the same time...try things out in an overly tentative manner. But if the innovation succeeds, you can extend it to the wider world. This allows policies to be tested, rigorously researched and adjusted, before being rolled out to scale.

Experimental government should take place locally, not just at the national level. Sub-national, local or city government offers a great opportunity to rigorously test out different approaches to policies, programmes and practice.

When
should the
experiment
start and finish ?

Short experiments can validate the desirability and test some of the riskiest assumptions of a promising idea. Longer experiments are needed to test the feasibility, say of a policy experiment, to better understand the winners and the losers of any new policy being launched.

The risk of not allocating a deadline for the experiment is that you will inevitability add more and more layers of complexity in the design of your idea or solution. Setting time constraints is a deliberate design strategy that can help simplify your experiments.

The following are examples of different types of experiments run under different time frames.

One day
experiments

One week
experiments

One year
experiments

One day experiments

Experiment

In 2012, Bing employees at Microsoft had an idea to improve the advertising headlines' display on the search engine page. Like most tech companies - which conduct several thousand online controlled experiments each year - Microsoft generated hundreds of other ideas in the same creative session and this small change was deemed a low priority.

The idea remained on the team's to-do list for over six months, until one engineer rediscovered it and realized it would not take him long to write the code for the experiment to assess its impact (an A/B test). Within a few hours, the new display was creating much higher revenue than it's controlled version. So much more revenue actually that it triggered a "too good to be true" alert that Microsoft had to warn of potential bugs in the system.

Result

Further analysis showed that this simple change sustainably increased the advertising revenue stream by 12% or over $100 million in the U.S. alone per year. It was the single greatest revenue improvement scheme in Bing's history and it nearly never happened.

One week experiments

Experiment

As part of a 2010 advertising stunt, VolksWagen organised a competition for people to propose innovative ways of improving road safety. The winning proposal consisted in creating a lottery out of the money paid by speeding motorists caught by speed cameras for the benefit of law-abiding ones. In addition to sending fines, the State would send letters to the drivers that drove past speed cameras under the limit, informing them that they could take part in a lottery to thank them for following the law. Week long experiments were made as part of VolksWagen's "Fun Theory" advertising and initial results were encouraging, though that was not the German car manufacturer's main objective.

Result

However, this innovative initiative attracted the attention of the Swedish State, which - following additional experimentation - decided to adopt the 'Speed Camera Lottery' as their national road safety protocol. The Swedish National Society for Road Safety estimates that, since the adoption of the practice, Swedes reduced their speed by between 32 km/h to 25 km/h and probably saved thousands of lives in the process.

One year experiments

Shorter experiments can validate the desirability and test some of the riskiest assumptions of a promising idea. However, only longer experiments can show whether the idea directly benefits the people. Ideally, these experiments are conducted using randomized control methodology. Long-term experiments are needed to see whether the wanted behaviour outcome remains in place. Here are three examples that illustrate the need for long term experimentation.

Example 1

Prospera, a conditional cash assistance program in Mexico, where families are provided cash assistance in exchange for children's school attendance, successfully increased attendance rates by 11% with girls and 7.5% with boys. This model eventually became a model for governments all over the world.

Long-term experimentation rational: A full year was the minimum time for this experiment to run since it needed to verify data during all phases of the school-year, from the first day to the end of year examinations

Example 2

The British Behavioral Insights Team (BIT) improved employment services and helped job seekers through experimentation. They made some British job centres concentrate on their user's future prospects instead of looking into their past activities, to see if it improved the pace at which job seekers found work again. The results were positive: employment levels improved considerably.

Long-term experimentation rational: The experiment needed to be long term since hiring processes still take time, even if the intervention would be successful - there a variety of reasons why even a good job seeker might not get a job right away.

Example 3

Y Combinator, an American start-up incubator, is beginning a long term experiment on the impacts of an unconditional basic income in Oakland, CA. The trial will last five years, during which 1000 people will receive $1000 per month, while a control group will only receive a $50 per month

Long-term experimentation rational: This multi-year experimentation time frame is needed since Y Combinator will measure a variety of outcomes ranging from wellbeing to time use, as well as professional development and education levels. These changes can only be analyzed over such timeframes.

Every successful experiment starts by forming a good team

EXPERIMENTATION STARTER KIT

Who

do you need to run the experiment ?

Every successful experiment starts with the formation of a good team. When forming an experimentation team it is important to remember that establishing new formal roles is not required. Existing employees can carry out most tasks very successfully without radical changes in roles. It is more about involving people with certain interests, perspectives, and capabilities that can execute the experiment.

The diversity of the team is a critical enabler of success. You can start by asking "who are the stakeholders? What are the risks? How long will it take for everyone to understand all the new processes, requirements and regulations?"

The following chart shows how different skills can bring different type of insights.

Wide knowledge

Learning skills

exploration skills

Co-creation skills

Practical thinking

Disruptive thinking

Data skills

Legal skills

Domain Expertise skills

Deep knowledge

No matter what the form of the team is, all these skills should be in an experimentation team to ensure success. Many of the skills are not needed throughout the experiment and one team member may have multiple skills.

Exploration Skills

is concerned with motivating the team to explore new horizons

▼

Encouraging the team to stay on the unconventional path

▼

Thinking differently and trying out the wild ideas

▼

Ignoring traditional notions and reinventing solutions

Legal Skills

Making sure that the experiment can be conducted within the boundaries of law

▼

Understanding legal issues and regulation

▼

Acting as a partner in identifying upcoming risks and regulations

▼

Owning the question of "why this won't work?"

▼

Identifying necessary tangible measures to be taken in order for innovation to smoothly translate into reality

Learning Skills

Listening to insight and being transparent of when and where the experiment is succeeding or failing is a critical skill required within any experiment

▼

Cumulative learning: The team builds on the learning from previous iterations

▼

Learning first: The team is not overtly focused on proving something is a success and not seeing the blind spots

▼

Reflection: The team knows when it is important to slow down to reflect what has been done

▼

Drawing conclusions and telling the team to switch direction when the original plan does not work as expected

▼

Uncomfortable feedback: Comfortable giving uncomfortable feedback to the team, ensuring they don't just hear but also listen to the signs when and where the experiment is failing

Co-Creation Skills

Experimentation links many stakeholders together, often both within and outside the organisation

▼

External connections: Helps the team to access and connect with end-users. Making sure that the team engages sufficiently with the people who are the expected end-users of the new policy, service or other initiative that is being experimented

▼

Internal connections: When experiments involve stakeholders outside the organisation, expertise in procurement is beneficial

▼

Empathy required to understand outside motivations and interests

▼

Building a diverse ecosystem of stakeholders

Data Skills

Experimentation requires measuring the before and after of any experiment

▼

Ensuring that relevant data sets are identified pre-experiment

▼

Helps to identify what can and should be measured

▼

Sets the data measurement protocols in place

▼

Statistical analyses of the data post-experiment to enable better evaluations

▼

Building the understanding in the team of the relationships between hypotheses, empirical data and outcomes

Expertise Skills

Experimentation requires specific domain expertise

▼

The general domain (such as healthcare, mobility, finance) of the experimentation

▼

Understanding the role different stakeholders could have with challenges connected to a specific domain

▼

Discovering the best context-sensitive experimentation practices in the selected fields

▼

Deep knowledge of the pitfalls and opportunities of the domain at hand

It is important to note that the core experimentation team does not have to possess all the skills mentioned above. For example legislative support or evaluations are often outsourced to an external actor.

At the entity level, managing and running experiments is a lean process and can be integrated into the existing structures and daily activities of any government entity.

When forming an experimentation team, it is important to consider the following to get executive level buy in and ownership:

Experimentation Officer

The Experimentation Officer is most likely a newly defined role or it can be an added portfolio to an existing senior leaders role. The main objectives of the the Experimentation Offier include building a repeatable and scalable model that helps employees in applying experimentation to their daily work, while providing the necessary guidelines and tools. Experimentation Officer is most likely a newly defined role or an added portfolio to an existing senior leader.

The goal of the experimentation officer is to build a repeatable and scalable model which helps employees to start applying experimentation to their daily work.

The responsibilities of an Experimentation Officer include

Ensuring a clear link between experimentation goals and purposes

Forming experimentation teams

Monitoring and supporting progress and reporting

Helping experimenters connect with relevant stakeholders

Providing guidelines and tools

Ensuring that learning happens on the level of each organization

Creating shared spaces for experimentation learning with external and internal stakeholders

Key Actions

**Allocate 1% of budget to experiments**
One common challenge during experimentation is the lack of resources. While experimentation does not require high costs, allocating a specific budget (for example, 1% of the organisation's budget) can be very effective in developing a path of least resistance.

Ensure documentation and evaluation
Experiments can fail and therefore it is important for the teams involved to understand and learn from the results.
This means that documentation and evaluation are at the very core of experimentation. When adopting experimental approaches in an entity it is important to enhance documentation and evaluation capabilities from the beginning.

Create incentives and encourage learning
Motivation for experimentation can be supported within the organization, for example, by introducing a learner award. It is an important part of building strong organisational capacities for experimentation. Experimentation is not always about succeeding; it is more about learning.
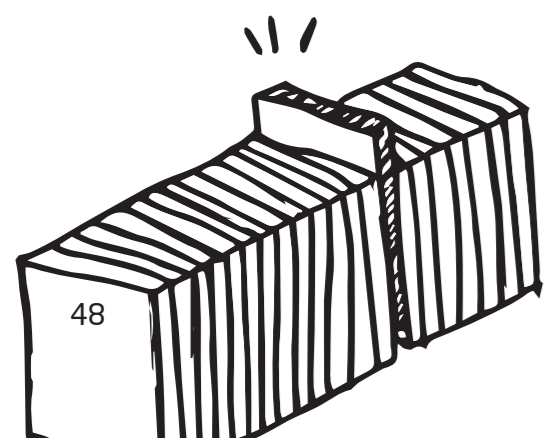
Fact Box

During the past 4 years, a few countries have started linking experimentation to the core activities of government. Experimentation has already been proven to be a highly beneficial tool for governments. Finland, Canada and United Kingdom have been leading the way on the development of experimentation models in public sector work.

Canada

In 2015 the government decided to start systematically developing an experimentation model by allocating a fixed percentage of the budget to experimentation

Finland

Experimentation in Finland has been utilized in policy-making. There is a collaboration between the Prime Minister's Office and various ministries in testing 27 different policy objectives - in other words it wants to be learning how experimentation can be utilized in mainstream policy making work.

United Kingdom

UK has established experimentation units. This unit is called behavioural insight unit and concentrates on applying small changes to services and the implementation at the end of a policy cycle. During the first 5 years of experimentation, savings of 300 million pounds were made.

Question: Where in the entity can experimentation be of best use
(e.g., back office activities, HR, customer-facing activities, designing new services)?

How
will you run the
experiment ?
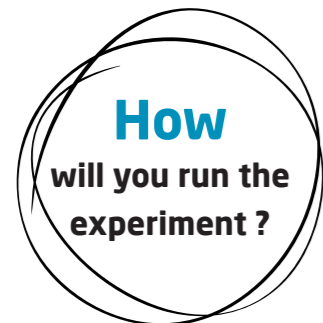
Having decided on the why, what, when, who – the next question to answer is how to run the experiment. You need to choose your experiment tool.

There are many tools to document the design and execution of your experiment. They range from the Experiment Method Canvas, to the Experiment Design Canvas, to the Experiment Card. There are at least four elements that are required in any documentation of an experiment:

1 Experiment type: What are you testing - Desirability, Feasibility or Viability.

2 Articulate the hypotheses. There are several ways to articulate . There are many ways to articulate your hypothesis. For example, "if this happens, then this would follow".

3 Expected result which needs to be simple metrics and quantifiable.

4 Target user should include very specific profile of the people you are testing with.

Experimentation objectives must be clear. One must develop a holistic understanding and mapping of the problem. The following is a problem canvas with sample questions that can be used as a tool to define and understand the problem.

DIY OO

I want to clarify my priorities
by focusing on key critical issues

PROBLEM DEFINITION

| What is the key issue you are trying to address and why is it important? | Who is it a problem for? | What social or cultural factors shape this problem? | What evidence do you have that this is worth the investment? | Can you think of this problem in a different way?

Can you reframe it? |

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Who is it a problem for?

What social or cultural factors shape this problem?

What evidence do you have that this is worth the investment?

Can you think of this problem in a different way?

Can you reframe it?

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Problem Canvas:

When attempting to solve the complex problems of the day, defining and framing the problem correctly may make the decisive difference in the process. The Nesta Problem Definition tool works by dissecting the problem. With this tool, a problem may be presented so that it can be examined from various angles in order to define its wider context and associated challenges.

What is the key issue you are trying to address and why is it important?	Who is it a problem for?	Why social/ cultural factors shape this problem?	What evidence do you have that this is worth the investment?	Can you think of this problem in a different way? can you reframe it?
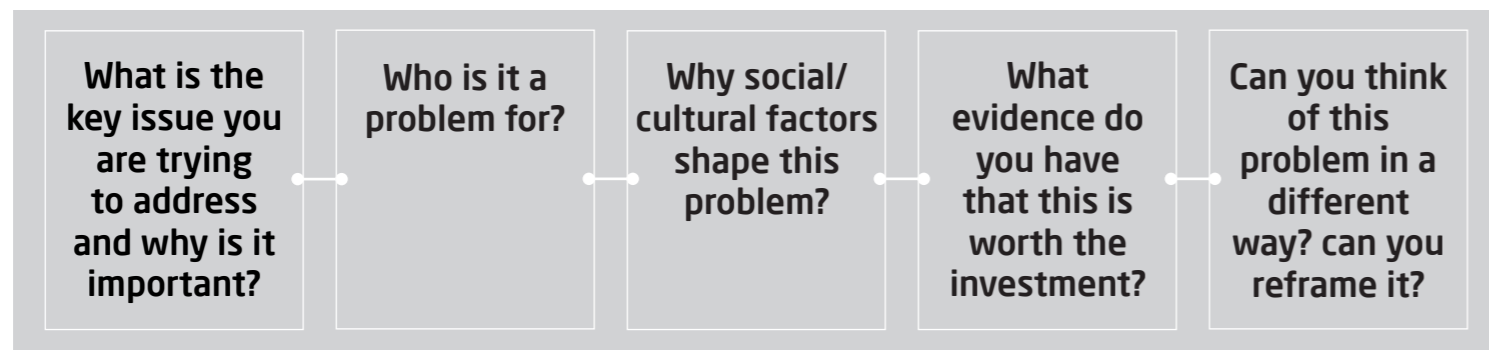
The exercise may lead to a 'reframing' of the problem at hand so that it can be seen in a different light. This allows solutions to be brought to a problem-solving process which initially appeared to be stuck. Utilising the worksheet with other stakeholders will usually bring up new contexts. For instance, working with service users, staff or volunteers may provide a slightly different angle to the tool than when working with managers or entrepreneurs.

Note: In most cases, if you have not redefined the problem statement after first iteration of the experiment, this should be considered a red flag.

It's important to experiment on the riskiest assumptions first. Furthermore, you should only be experimenting on one problem at a time. Otherwise, you'll end up turning this into a project or initiative, which limits the advantages of experimentation.

There is no one universal path to achieving progress at the country level on experimentation. The following examples of key action steps can help kickstart momentum towards rigorous, structured, and focused experimentation.

Align to national strategy

Experimentation should always be aligned to priorities of a national strategy. It can be considered as a vehicle for achieving the goals faster, better and easier than the traditional methods.

Create shared infrastructure

One reason why people do not experiment with fundamentally new solutions and approaches is because the status quo is simply easier. Developing a shared infrastructure that includes physical zones, playbooks and programs, can fundamentally create an easier path towards successful experimentation.

Physically locate in the core of government entity

Experimentation should not be done behind closed doors. Transparency is key to establishing an experimental mindset and culture. Therefore, once you've identified the why, what, when and who of the experiment, it is important to have a physical space to demonstrate the experimentation journey or successful stories.

The below stages will help the Experimentation Team to draft an Experimentation plan and start the journey towards making experimentation happen.

Exploring

Testing

Validating

Exploring

When exploring the topic, aim to challenge your own thinking and map solutions widely. Seek answers from those who have worked on the topic before (you don't want to reinvent the wheel).

Also look to unobvious directions – innovations may appear where you least expect them to. Remain ambitious and think of the best possible outcomes.

Find more information about the goal and what others have previously done.

Push the boundaries of your thinking!

Don't work alone!

Draft a "rapid test plan".

Can you create a solution you can test in 1 hour?

Think bigger!

How can you test the goal with others?

Testing

Testing is about seeing whether ideas successfully work in practice. It is recommended to move from the planning phase to action as soon as possible while remaining flexible on the direction. Share your findings, test again and plan for the future.

How can you move towards bigger experiments?

Move from plans to action, in a timely manner.

Conduct a 1-day experiment and 1-week experiment.

Document the results, share them and ask for feedback.

Feedback provides an opportunity to learn and plan further. Make plans for next steps.

Should you implement bigger experiments? Do you need to change course?

The Experimental method canvas helps your team to come up with different test plans.
Use the canvas in the following way:

Objective

Name the objective that you'd like to reach.

Assumption

Write down the underpinning assumptions.

Hypothesis

Translate your assumptions into if-then statement.

Experiment

Write down a concrete experimentation plan that will test the hypothesis.

What's next

Elaborate your results and decide if you should:

▶ Call your experiment a success and prepare for scaling the solution.
▶ Experiment again for learning more.
▶ Forget the idea.

Make sure to run several light experiments that aim for the same objective in order to test different approaches.

Fill in the empty canvas above to ideate experiments.
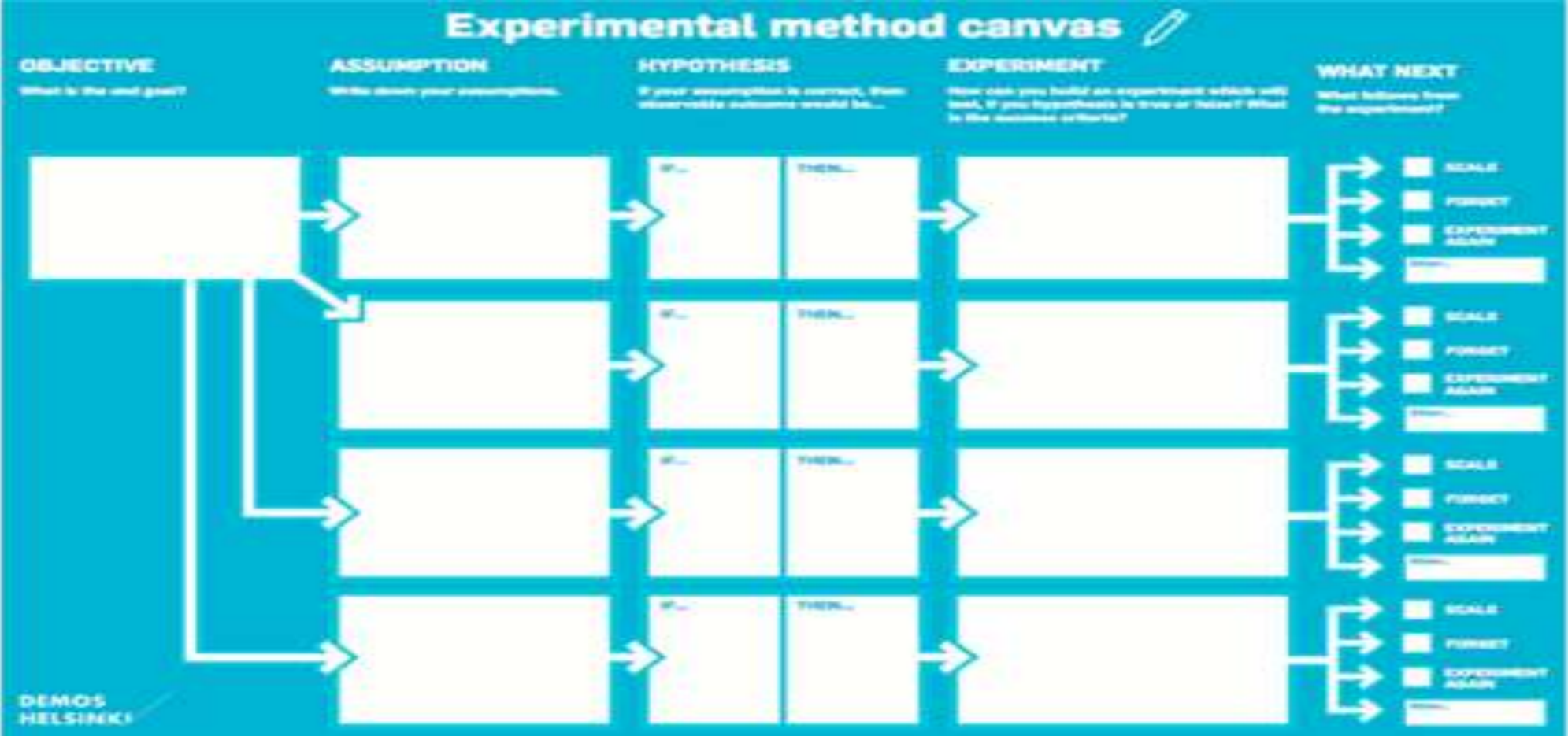
foldable page

Validating

Ensure that you have enough evidence that can convince others. Validating experiments aims to produce robust evidence. Before an idea can become a national policy, and before a new technology can safely be released in the market, it needs to be tested rigorously. Work towards the best evidence you can find!

Conduct a validating experiment. This aims to produce results that you can be confident about.

Work towards building evidence that is convincing to others.

Monitor progress systematically and evaluate results.

Report and share the results.

When your team does experimentation well, most things do not go as planned during an experimentation. It is a learning process which could mean changing direction.

Why
do you want
to experiment?

What
you want to
experiment on?

When
should the experiment
start and finish?

Who
do you need
to run the experiment?

How
will you run
the experiment?