Scottish Government

Leading Improvement Team

Interactive Toolkit

Use the icons to move between pages:

Click to enter Workbook and return to main menu

Click to enter journey stage and return to sub-menu

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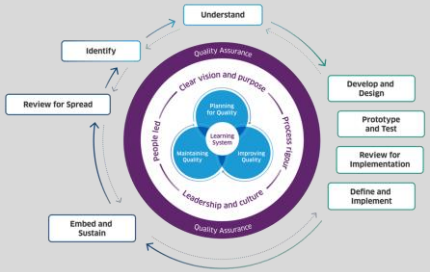
LEARNING SYSTEMS

QUALITY MANAGEMENT SYSTEMS

Scottish Approach

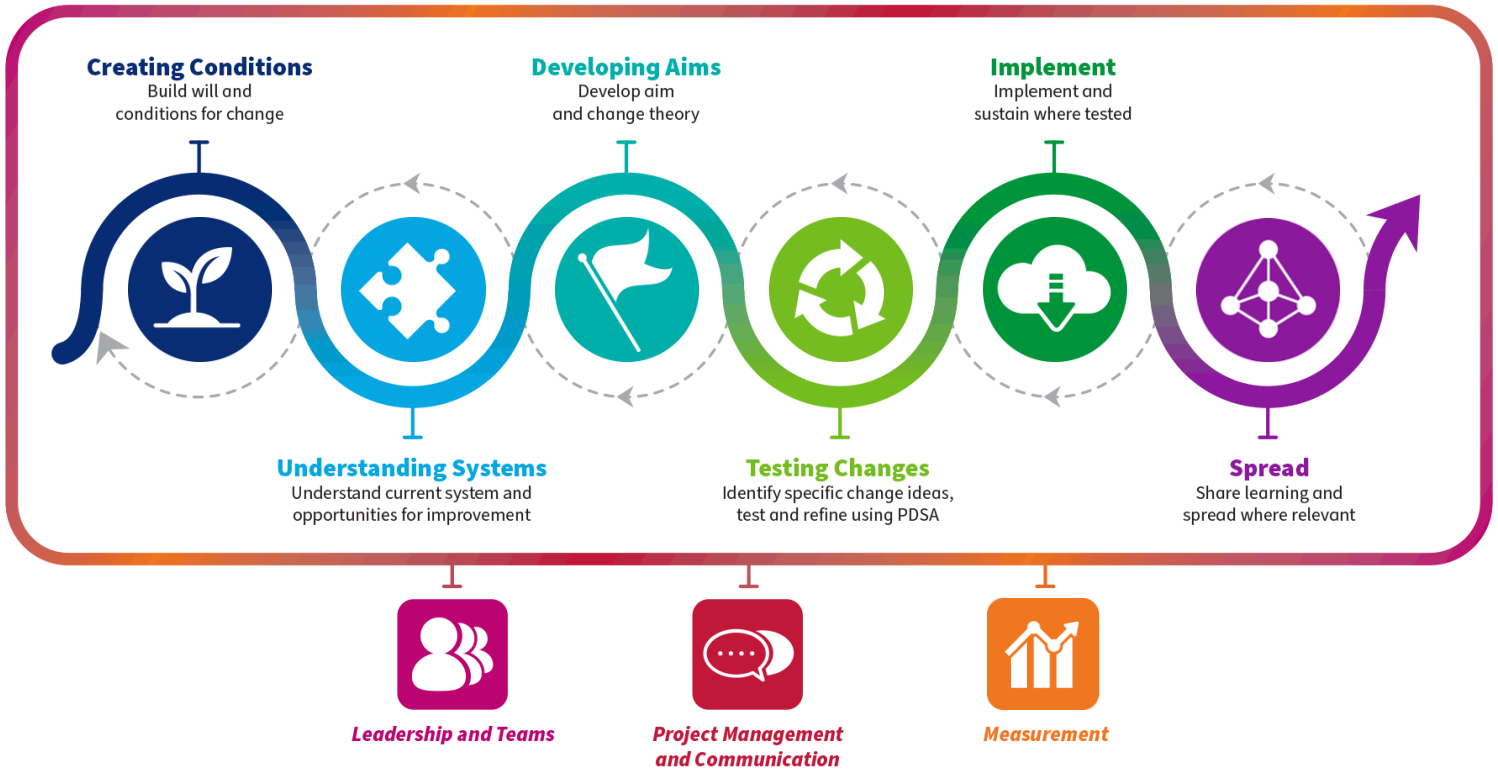


EFQM Model

PSIF Framework

Q·I QUALITY IMPROVEMENT

QUALITY IMPROVEMENT JOURNEY



QUALITY ASSURANCE

Gateway Review

SCOTTISH APPROACH to CHANGE

Why use it

The Scottish Approach to Change (SAtC) offers a whole system framework for quality, helping people and teams improve the right things in the right way.

What is it

Developed by Health Improvement Scotland in 2025 in partnership with Scottish Government and other key stakeholders, the SAtC brings together different evidence-based methods and tools for manging quality and change.

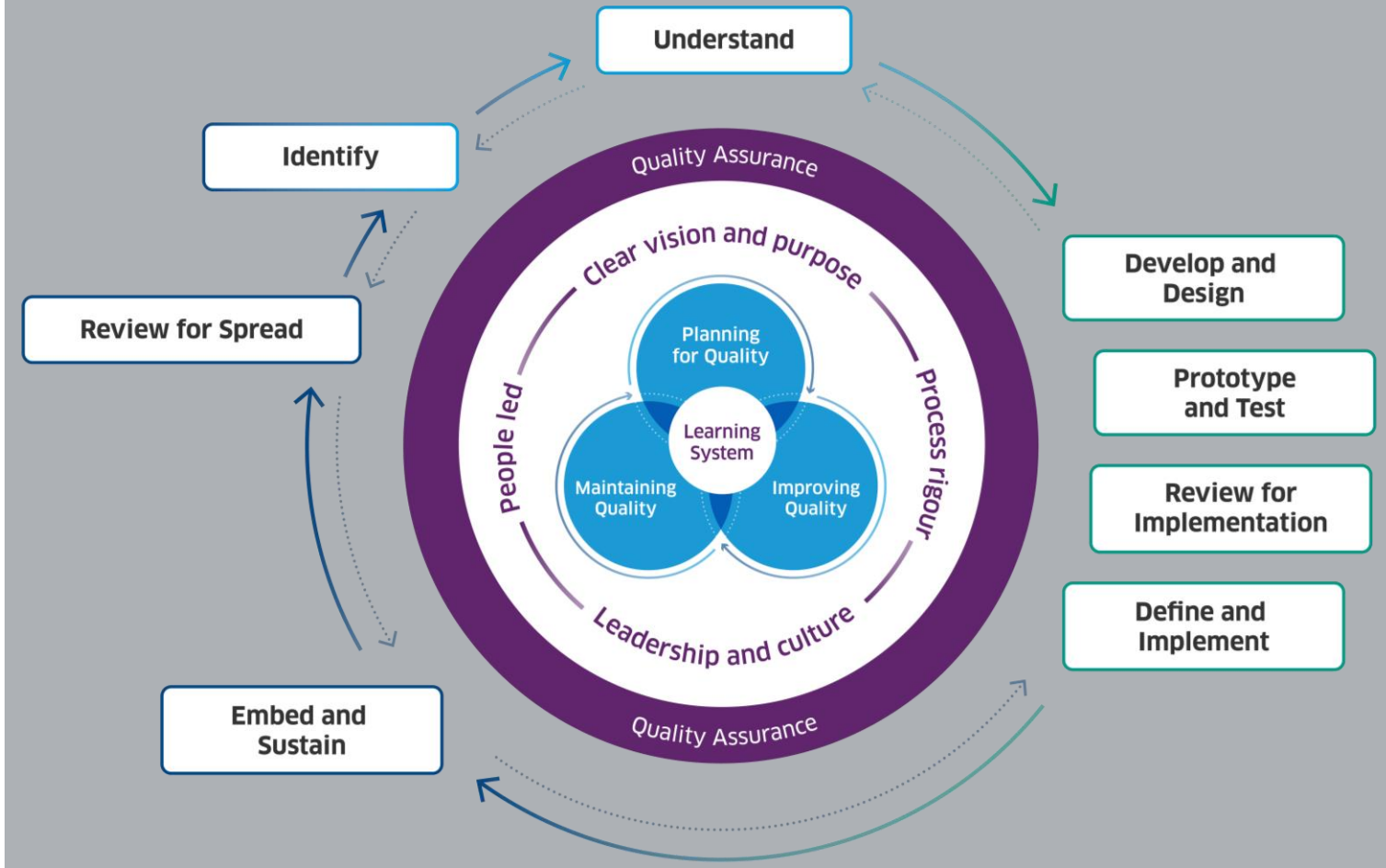
It has eight steps (outer boxes) and five enablers (Clear vision and purpose, Process rigour, Leadership and culture, People led, and Learning System). The blue circular layout at the centre and outer purple ring represents quality management systems.

How to use it

It can be used for manging quality and change at an organisational level or delivering discrete change in projects. Use the approach to open-up discussions about what enables high quality in the system(s) under consideration. Co-design and produce with service users, stakeholders and people working in the system(s). Prioritise and plan improvement work. Use the Quality Improvement Journey to implement change and measure performance.

Useful links:

Health Improvement Scotland ihub, (2025), Scottish Approach to Change.



EUROPEAN FOUNDATION FOR QUALITY MANAGEMENT MODEL

Why use it

The European Foundation for Quality Management (EFQM) Model is a strategic framework to help identify areas for improvement in an organisation.

What is it

It's a globally recognised non-prescriptive self-assessment model designed to take a holistic view and see the performance of an organisation as a whole and as part of an organised system. It considers the organisation's ambitions for the future, referenced against its current ways of working and its responses to challenges and pain-points.
Its structure is based on three questions:

1. "Why" does this organisation exist? What Purpose does it fulfil? Why this particular Strategy? (Direction)
2. "How" does it intend to deliver on its Purpose and its Strategy? (Execution), and
3. "What" has it actually achieved to date? "What" does it intend to achieve tomorrow? (Results).

How to use it

As with all improvement work and before conducting a self-assessment, create a powerful story to build will and create the conditions for change. Use the EFQM criteria and its RADAR logic to evaluate current performance and support improvement. Identify strengths and areas for improvement. Prioritise and plan improvement work. Use the Quality Improvement Journey to implement change and measure performance.

Useful links:

The EFQM Model 2025

PUBLIC SERVICE IMPROVEMENT FRAMEWORK

Why use it

The Public Service Improvement Framework (PSIF) enables organisations to identify their strengths and potential areas for improvement, inform planning and define improvement initiatives.

What is it

Used predominantly in local authorities, community planning and social care, the PSIF is a self-assessment approach to support improvement in organisations, with a comprehensive review of their own activities and results. It promotes a robust approach to continuous improvement and is mapped to a number of established organisational improvement tools.

How to use it

PSIF 2023 provides a framework of 66 standard statements under six sections (see graphic) to challenge existing performance through a structured process, which is developed to suit organisational needs and drivers. The statements can be adapted for use at a service, corporate or organisational level to support continuous improvement.

Through a programme of training, awareness raising and support from the Improvement Service PSIF team, PSIF organisations can systematically roll-out a programme of self-assessments throughout their organisation. Prioritise and plan improvement work. Use the Quality Improvement Journey to implement change and measure performance.

Useful links:

Improvement Service, (2023), Self-Assessment: Public Service Improvement Framework

I want to…

Build will and conditions for change*

*Tools identified here can also be used for Understanding current system

by understanding the culture of a group
CULTURE MAP

by understanding the thoughts of a group
EMPATHY MAP

by seeing things through the eyes of others
EXPERIENCE MAP

by understanding behaviours and actions
ISM MODEL

by understanding the user journey
JOURNEY MAP

by understanding the needs of different people
PERSONAS

by understanding the perspectives of others
STORYBOARD

Why use it

To help identify cultural blockers/ enablers and provide an action plan to move to the desired state.

What is it

Developed by David Gray (Xplane) Culture Mapping is a tool designed to understand the cultural blockers and enablers that cause resistance to change. In understanding the blockers/ enablers, management and teams can work together to cultivate a positive culture for the future.

How to use it

Use the map on the right to identify the cultural blockers/ enablers and develop the action plan.

Identify the groups that represent the various sub-cultures in the organisation. Individually, convene one 90-minute cultural mapping session with 5-6 people from each group. (People who know each other and work together on a regular basis.) Each session should be facilitated by someone independent from the group and ideally, who has experience in leading cultural mapping sessions. The output of each session is a simple document that describes the current state and a clear set of actions to move to the desired culture.

Useful links:

Gray, (2015), What is Culture Mapping and why should you care?

CULTURE MAP

Outcomes

Outcomes are tangible results, often expressed in terms of time and money

What results are we seeing?
What happens because of our behaviour?
What are we getting done?
What is the impact?

Behaviours

Behaviours are specific, concrete, tangible and observable

What does a great day here look like?
What does a terrible day here look like?
How do we do things around here?
What is a specific example of a typical behaviour?
How would you describe it as a scene in a movie?
Can you tell a story about a typical pattern of behaviour?
How does that make you feel?

Enablers & Blockers

Enablers enable behaviours, blockers block behaviours. Some are formal and explicit, like rules, incentives and procedures. Others are informal and implicit, like unwritten rules, habits and routines.

Why do we behave in the way that we do?
What causes or influences our behaviours?
What are leaders saying or doing that enable these behaviours?
How are people rewarded for their behaviours (both positive and negative)?
How does the physical workspace enable certain behaviours?
What needs are being met by these behaviours?
What blocks us behaving differently?
What are the unwritten rules?
What habits or routines are easy to change? Why?

EMPATHY MAP

Why use it

To help identify the thoughts and feelings of a particular group on a specific issue.

What is it

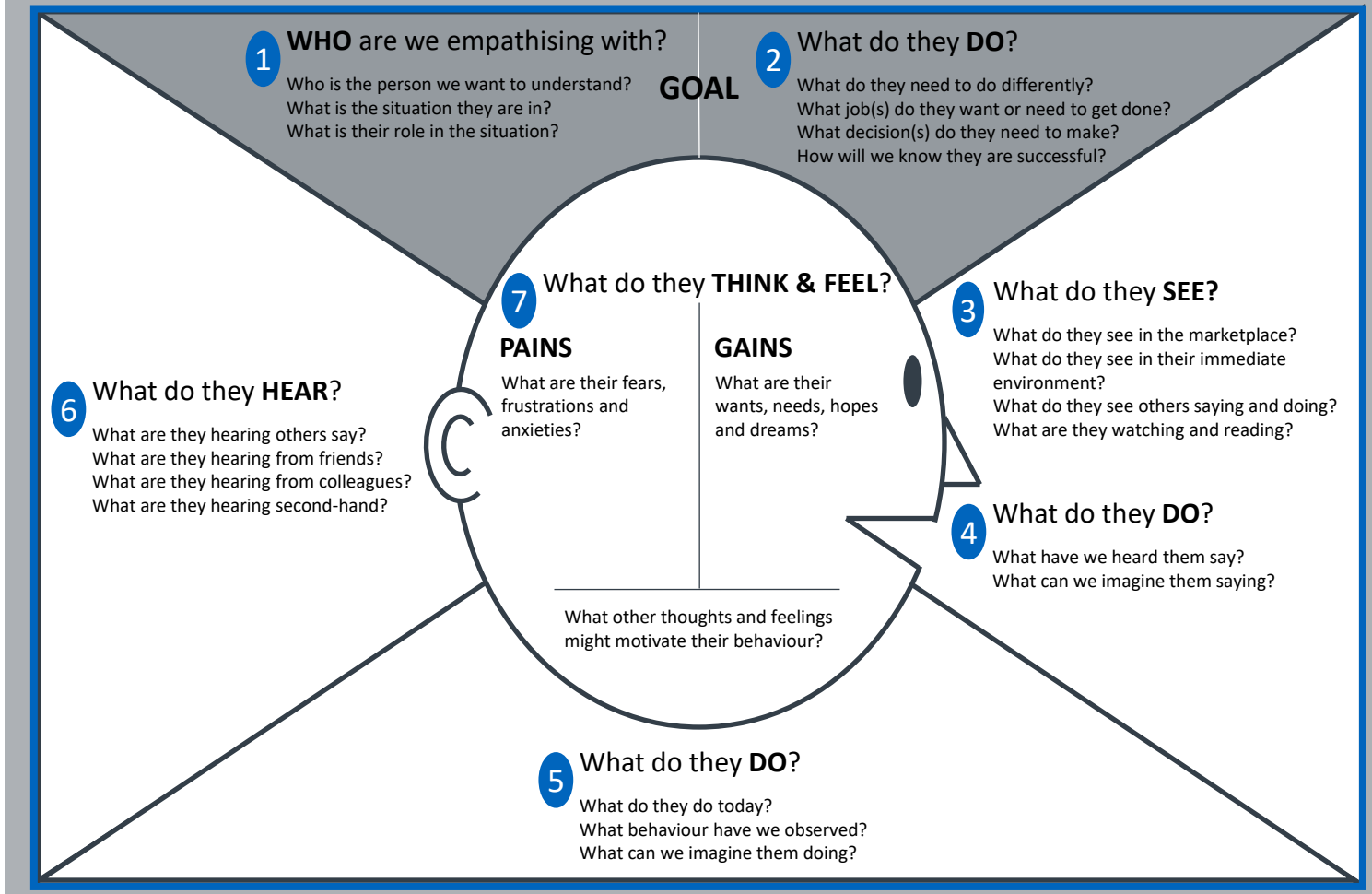
Developed by David Gray (Xplane), Empathy Mapping is a team process that helps you identify the thoughts and feelings of a particular group on a specific issue. It does this by making you look at the issue through their eyes. It requires you to: identify your subject; collect data on your subject's perceptions of the situation; work as a team to build a map, and; reflect on your findings before drawing conclusions.

How to use it

Use the template on the right to answer the seven questions. Work with your respective teams to capture answers and opinions of the group. Once you've done this, step back and review what you've collectively come up with. If possible, ask the groups to compare and contrast the insights of others and offer their thoughts and opinions.

Useful links:

Gray, (2017), Empathy Map



Why use it

To build an understanding of how people working in a system are feeling and provide a structure for developing ideas.

What is it

Experience Maps are a good way to spark inspiration by learning first hand about what makes a great experience (or what doesn't if experience has been poor).

How to use it

Use the worksheet on the right to record answers to questions and jot down notes as you 'walk the floor' to experience what's going on. (Tip: it's worthwhile familiarising yourself with your questions beforehand so you know what to record.)

The idea is to really try and immerse yourself in the experience and what's driving it. Think about how it made you *feel* as well as what *happened*.

You can complete one worksheet for every tour and compare and contrast with others to see if there are any emerging themes or contradictions you might want to explore further. The questions on the worksheet are there simply to get you started – you can (and should) develop your question-set as you build knowledge of conducting experience tours.

Useful links:

GOV.UK, (2017), Creating an experience map

EXPERIENCE MAP

What is the focus for this map?	What information is used? What's missing?	What works well?	Notes & Remarks
What are the practices observed?	What products are used?	What works less well? Even better if…s?	Notes & Remarks
Who's involved?	What's the environment like?		Notes & Remarks

ISM MODEL

Why use it

To understand personal beliefs, social context and material factors of a matter under consideration.

What is it

A practical tool developed by the Scottish Government, the ISM Model highlights key factors/ influences which shape people's choices and behaviours – their own personal beliefs, social context and material factors. By understanding the context and relationship of these, more effective policies and interventions can be developed.

The ISM Model can also help understand factors influencing specific behaviours and generate ideas for how policy can better influence them. For example, it can help:

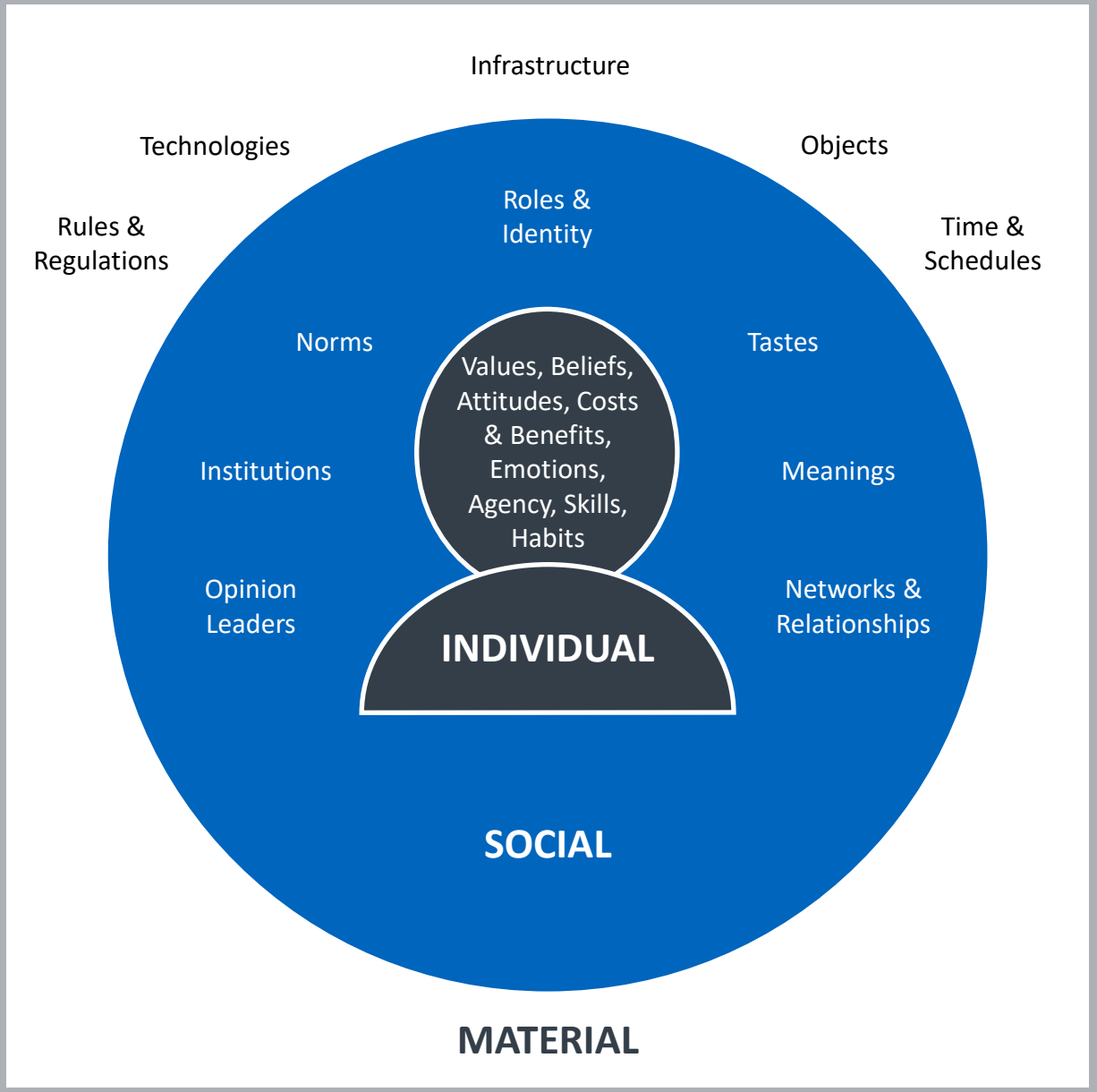
- understand what factors influence a behaviour we want to change
- understand why behaviour change has happened (or is not happening)
- consider a behaviour in a new way, and
- design and develop behaviour change policy and interventions.

How to use it

Use the model on the right along with other tools such as Culture Map, Empathy Map and Experience Map to understand personal beliefs, social context and material factors of a matter under consideration.

Useful links:

mygov.scot, (2013), Influencing behaviours – moving beyond the individual: ISM user guide



JOURNEY MAP

Why use it

To build an understanding of how users feel, behave and what they expect of public service.

What is it

Journey Maps provide a snapshot in time of the user experience as they receive and move through a service. It doesn't need to be limited to the user experience, you can (and should) capture the experiences of those providing public service and stakeholders who have an interest to secure an all-round experience.

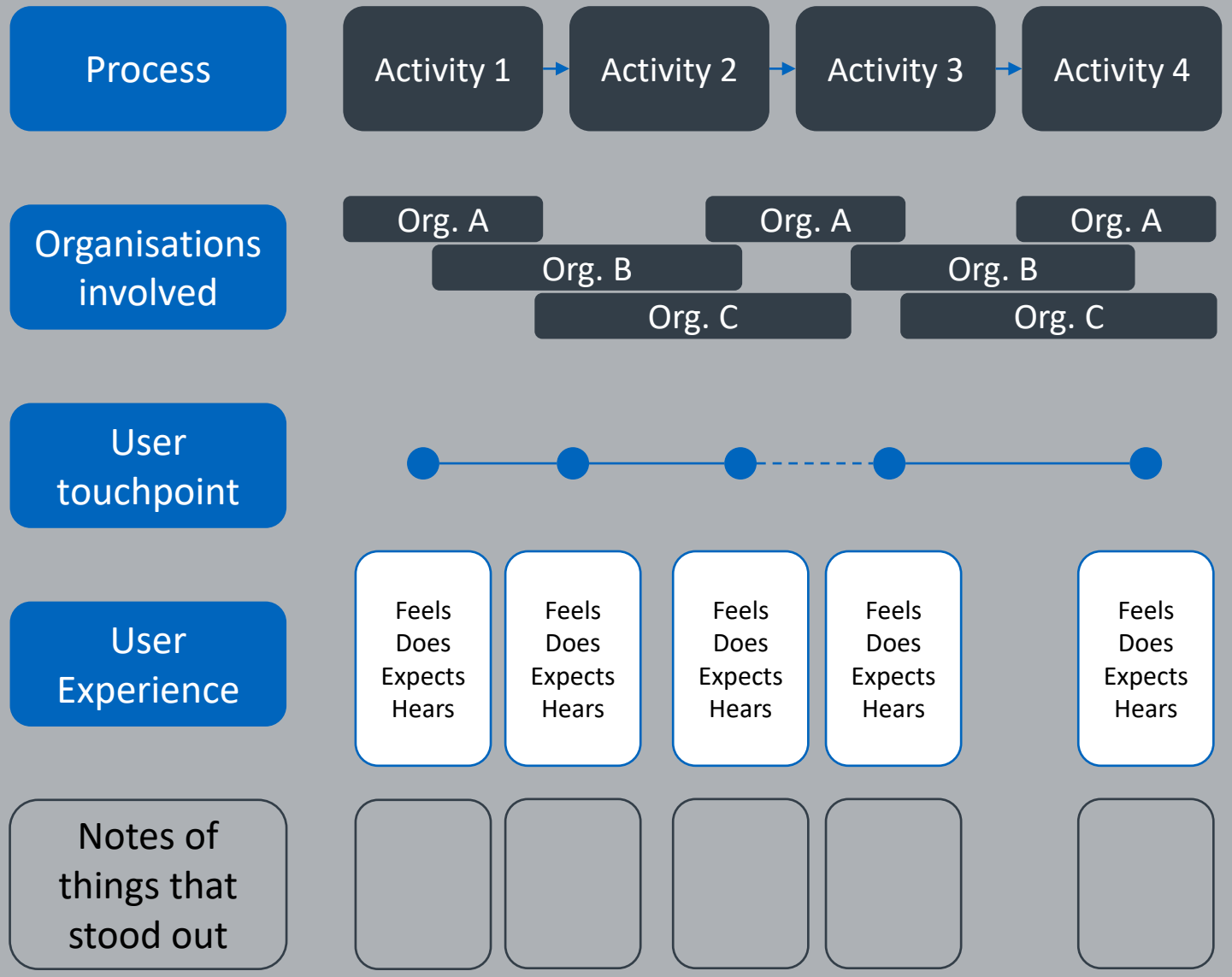
Understanding experiences will help you identify what's working well and less well. This will help inform what needs to improve and in what order.

How to use it

Journey Maps are particular to the journeys under consideration, but like the example on the right, they can be used in conjunction with a Process Map to help you understand the touchpoints. The Culture Map, Empathy Map, ISM, Experience Map and Storyboard can all help to capture experiences. The Stakeholder Map can help identify which organisations are providing what service along the journey.

Useful links:

GOV.UK, (2019), Improving content through journey mapping



Why use it

To build an understanding of the users of a system under consideration, the people who work in it and stakeholders. Understanding ‘archetypal’ characters in your system helps you stay focused on the people who matter.

What is it

Personas are portraits of system users, people working in the system under consideration and stakeholders.

They are created by drawing together the characteristics of these people - their behaviours, motivations and the like - into one ‘archetype’ through which you can understand their different needs. By creating a fictional character to embody these characteristics, you don’t lose the little details that make someone the person they are. In this way, Personas help ensure that your work stays focused on people, rather than an abstract description of the group they are said to represent.

How to use it

Use the Persona template on the right to compile the various personas you would like to collect. Try and make the Persona as close to a ‘typical’ person as possible by adding an alias photograph and name to bring it to life. Different perspectives collected as part of Storyboard’s can also help inform the development of Personas.

Useful links:

Nesta, Personas

PERSONAS

	Who am I?	Three reasons for me to engage with you:	Three reasons for me not to engage with you:
Persona name: Audience segment:		1. 2. 3.	1. 2. 3.

My interests	My personality	My skills	My dreams	My social environment

Why use it

To understand the different needs and perspectives of system users, people working in the system and stakeholders.

What is it

A Storyboard represents qualitative data collected through interviews and observations. It's a useful way to highlight the most relevant insights from your research without being overwhelmed by detail.

It can be used alongside Personas and Experience Map to help you Understand System and what needs to be improved. It allows you to create stories that make people easier to relate to – often matching the circumstances of where people find themselves in their professional life. These stories can often trigger creative Change Ideas.

How to use it

Use the template on the right to co-produce and map the different perspectives and needs of users, people working in the system and stakeholders. It's a great way to build will! This tool can also be used to inform the user experience for Journey Maps.

Useful links:

nesta, Storyboard

STORYBOARD

Profile

Context

Connections & Relations

Objects & Places

Self

Perceptions

Aspirations

Memorable quotes:

Notes of things that stood out:

I want to…

Understand current system and opportunities for improvement

by finding the problem

DEFINE THE PROBLEM

by exploring the problem from multiple perspectives

PROBLEM FRAMING CANVAS

by identifying root cause issues

CAUSE & EFFECT ANALYSIS

by making sense of a situation

CYNEFIN FRAMEWORK

by knowing what needs to be improved

EVIDENCE PLAN

by analysing ideas for change

FORCE FIELD ANALYSIS

by using data to inform what needs to improve

PARETO ANALYSIS

by identifying relationships and dependencies

PROCESS MAP

by asking questions

QUESTION LADDER

by knowing the stakeholders

STAKEHOLDER MAP

by understanding where value is generated

VALUE MAP

by gathering multiple perspectives of stakeholders

STAKEHOLDER VIEWS (Pig Model)

DEFINE THE PROBLEM

Why use it

Allows a problem to be opened-up and presented in ways that can be examined from a number of different angles, as-well-as helping define the wider context and associated issues involved.

What is it

This is a particularly effective tool to help focus a team on the key problems at hand. It introduces a small set of key criteria to understand and assess a problem. It also provides a standardised way to compare several different problems which might seem to be different.

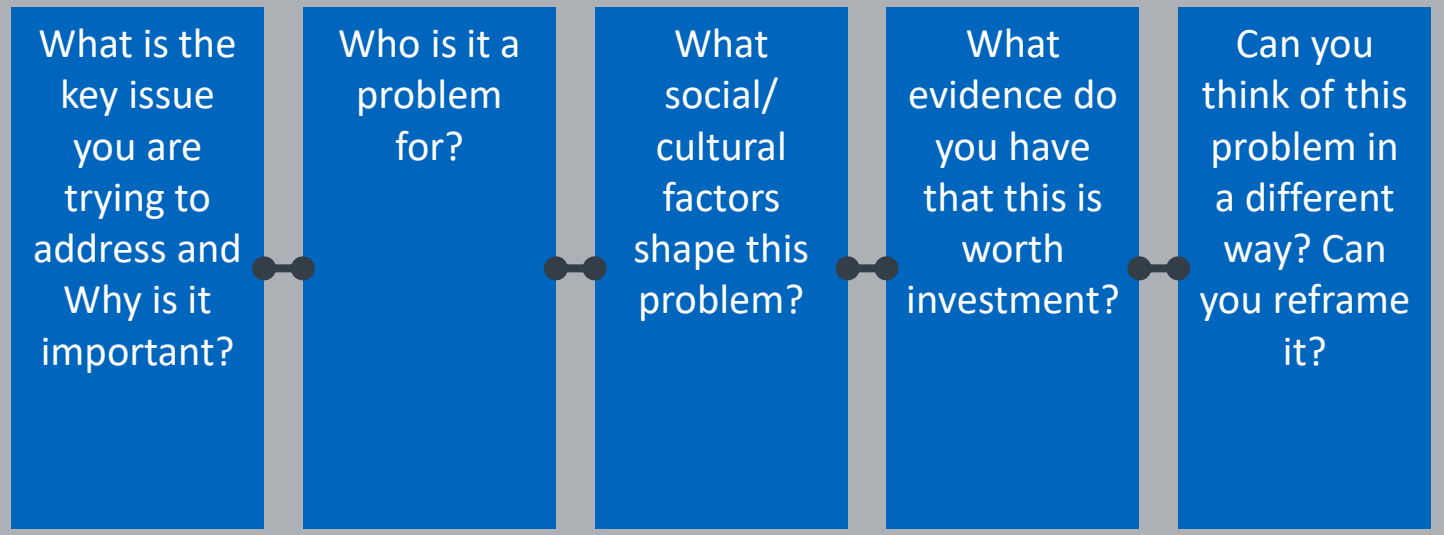
How to use it

Use the questions on the right to reflect on a specific problem with a group of people (i.e., system users, people working in the system or stakeholders). Individually, write down on a sticky note (virtual or paper) your thoughts and reflections on the problem under consideration. Place your sticky notes in the relevant fields in the template. Compare and contrast observations – is the group seeing the problem in the same way? If not, it may lead you to reframe the problem in another way and surface new things to consider.

This tool can also be used in conjunction with Cause & Effect and Question Ladder to help understand a problem.

Useful links:

nesta, Problem definition



PROBLEM FRAMING CANVAS

Why use it

It is particularly useful for analysing complex policy challenges where understanding the system is as important as the solution.

What is it

The Problem Framing Canvas is a sensemaking tool for exploring, analysing and reframing a problem from multiple perspectives before deciding how to respond. It helps define problems and reframe in different ways. It helps to understand causes and context, explore stakeholders affected, identify assumptions and test ideas.

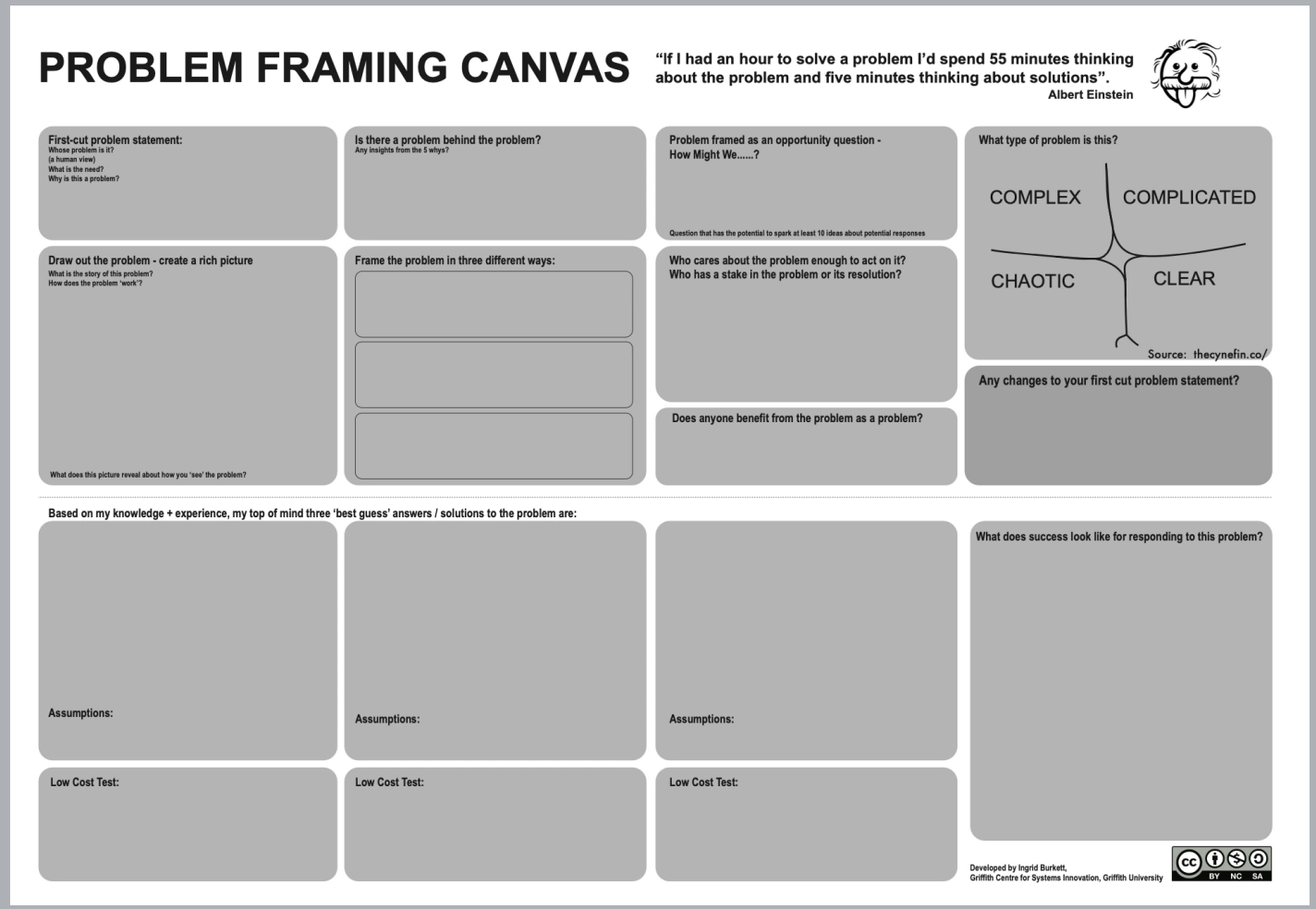
How to use it

It can be used individually but usually in a workshop or team setting. Use canvas on the right to work through stages:

- defining the problem and explore to identify root causes
- identify stakeholders
- reframe the problem in different ways
- classify the type of problem and reframe into an opportunity
- generate ideas and test assumptions
- describe what success would look like before,
- refining the problem.

Useful links:

Burkett, I., (2023), The Problem Framing Canvas Handbook.



CAUSE & EFFECT

Why use it

To understand root cause problems associated with things you're trying to fix.

What is it

Also known as a Fishbone, Herringbone or Ishikawa Diagram, this technique helps you consider all possible causes of a problem, rather than just the ones that might appear obvious. It can also be used in reverse, working back from what needs to be put in place to get to a desired state, and simultaneously to identify solutions to problems.

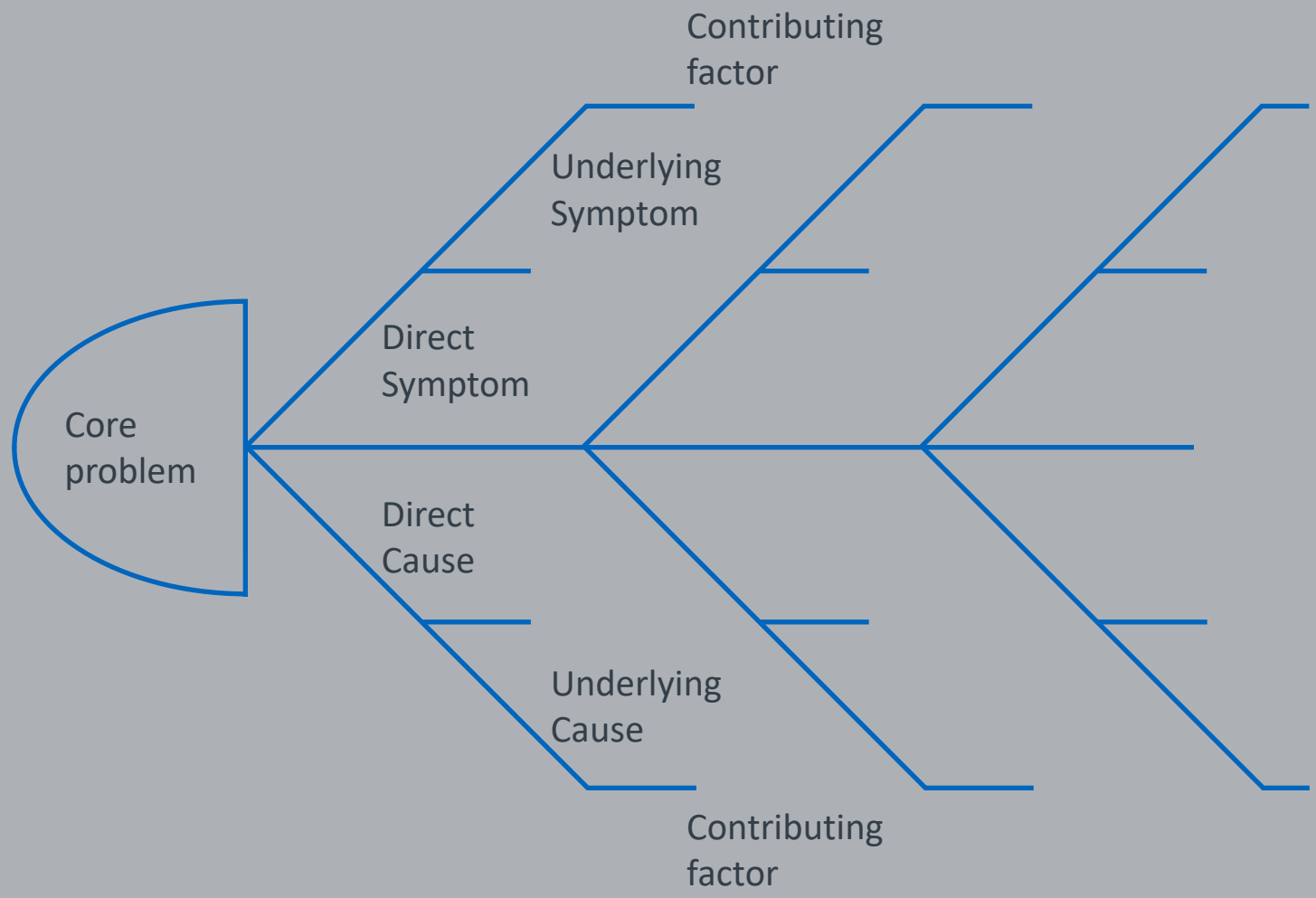
How to use it

Use the template on the right along with other identification tools such as Define The Problem and Question Ladder to understand the problem you're trying to fix.

Step **1** – identify the problem – what is it? Who's involved? Where and when does it occur?
Step **2** - identify the direct and underlying symptoms you see as a result. Any contributing factors?
Step **3** – identify the direct and underlying causes to these systems. Any contributing factors?
Step **4** – go through each symptom and cause making sure it's correctly placed. Discuss what you can learn from this to help shape future improvement aims.

Useful links:

NHS Education for Scotland, Cause and Effect Diagram



Why use it

Good for sensemaking, understanding challenges and making decisions in changing circumstances.

What is it

Developed by David Snowden in 1999, the Cynefin Framework is a problem-solving tool that helps put situations into five “domains”. This helps make sense of situations so better decisions can be made and mistakes avoided.

How to use it

Use the map on the right to identify the situation you’re in.

Obvious is where the situation is stable and clear (known knowns) and just require to be assessed, characterised and responded to using good practices. Complicated may contain multiple answers (known unknowns) which need to be assessed, analysed and responded to using good practices. Complex situations don’t have right or wrong answers (unknow unknowns) and need to be probed, assessed and responded to in an emergent way. Searching for right answers in Chaos situations would be pointless (unknowables). No manageable patterns exist, only turbulence. Here, the immediate job is to act and ‘stop the tide’ before making better sense of the situation and responding using new methods. Disorder is when it’s unclear which of the four domains apply.

Useful links:

Brougham, G., (2015), The Cynefin Mini-Book.

THE CYNEFIN FRAMEWORK

(ku-nev-in – Welsh for Place or Habit)

EVIDENCE PLAN

Why use it

To understand what needs to improve and the fundamental options to make this happen.

What is it

A quick way to help articulate and improve what you are trying to accomplish.

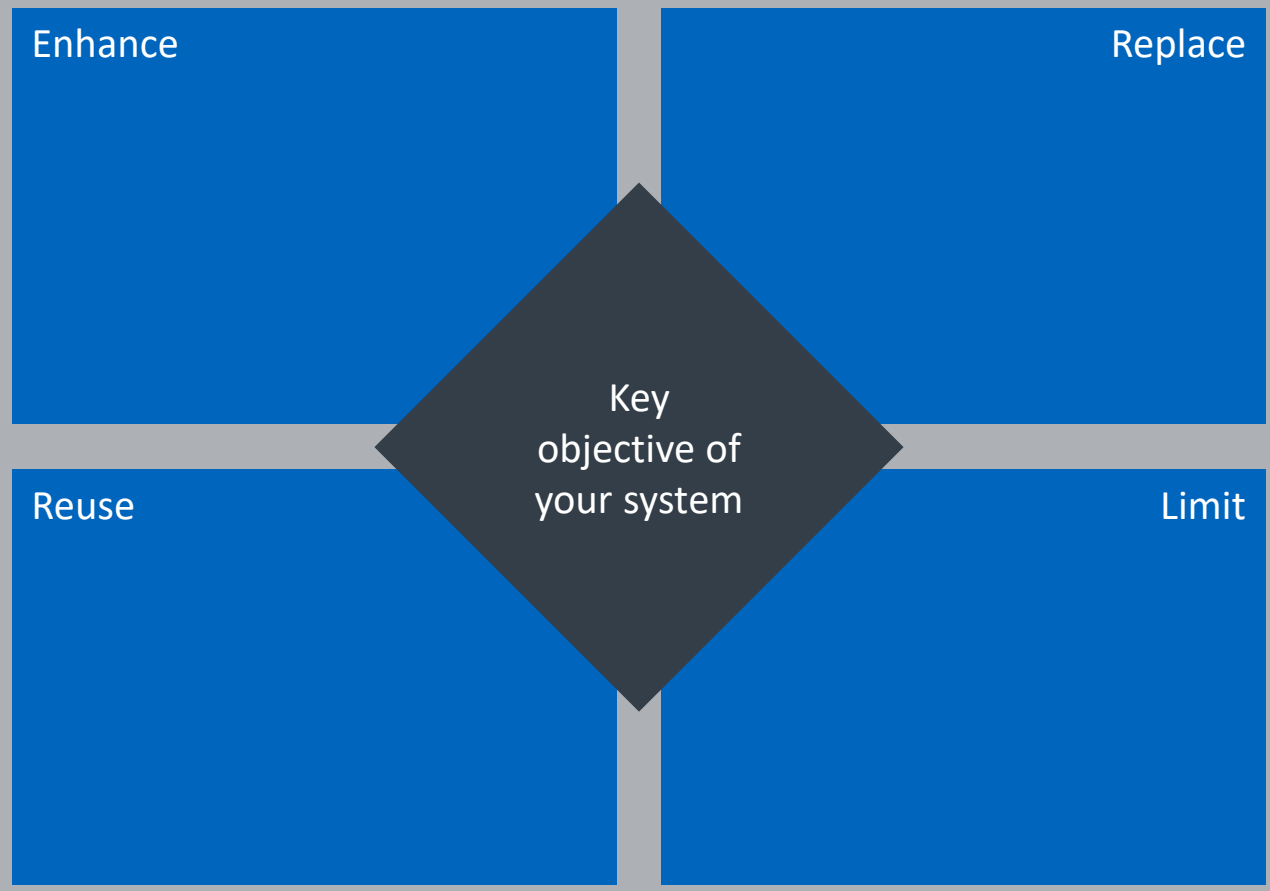
It gives you an easy way to define and share what you're trying to do, and the assumptions and evidence upon which this is based. It helps you construct an evidence-based case for the impact you want to have and a structure to project the effects of your activities onto the future. This will help you reflect on what you may want to change and improve. It also highlights at an early stage, any potential problems or easy to make mistakes.

How to use it

Use the template on the right and fill out the key objectives of the work under consideration in the middle. Use the propositions in each of the four quadrants to think about how you might improve by adopting this approach. Consider using alongside an Experience Map, Journey Map, Personas, or Storyboard to think about different perspectives.

Useful links:

nesta, Evidence Planning



FORCE FIELD ANALYSIS

Why use it

To consider the benefits and drawbacks of a potential change idea.

What is it

A really useful tool to consider the benefits and drawbacks of a potential change idea. At its simplest, the benefits and drawbacks are identified and shown either side of the change idea on one page. Some have a bigger impact than others - to reflect this, you may want to introduce a weighting system similar to the example provided on the right.

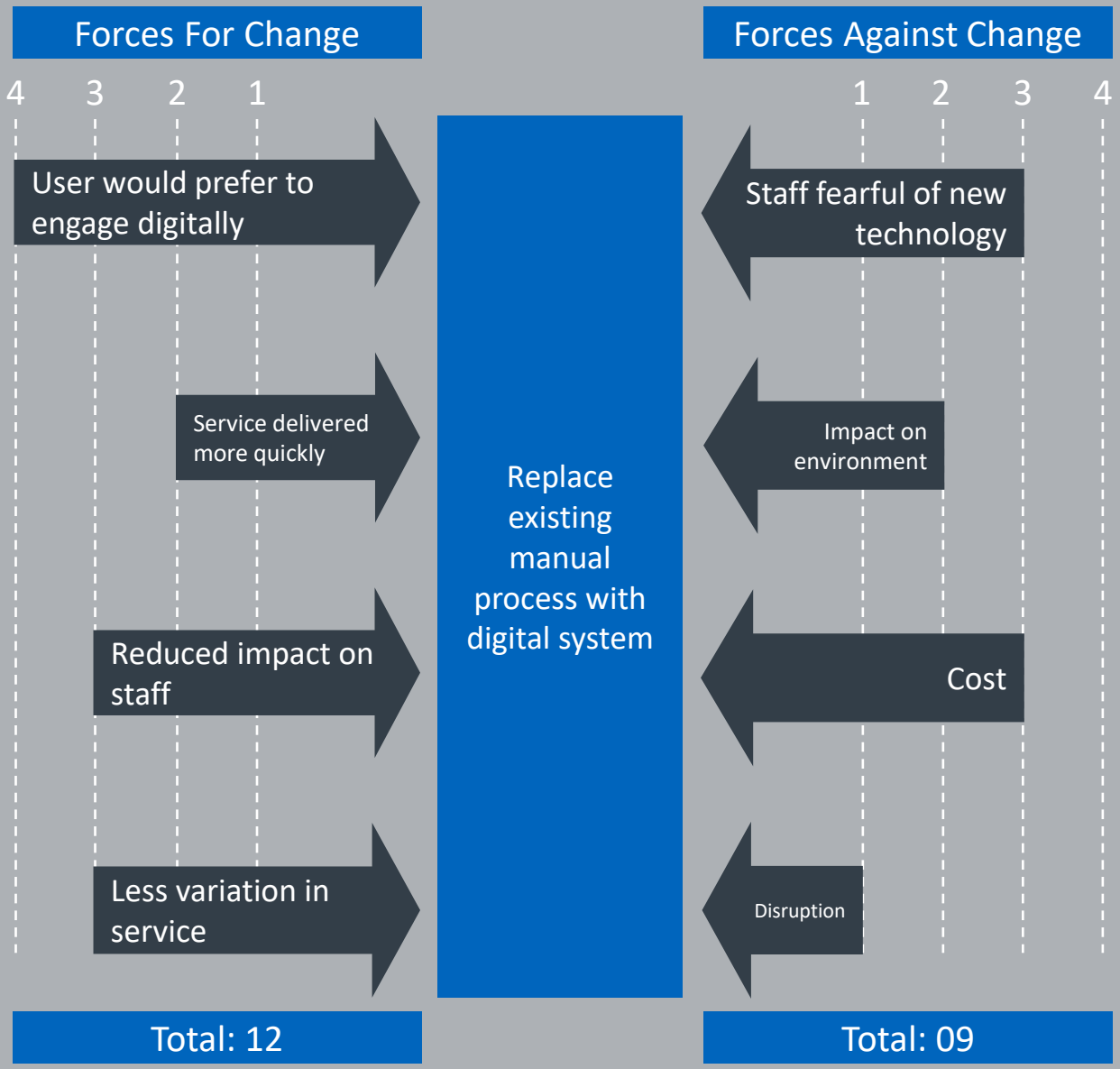
How to use it

Following the example on the right, place the change idea in the centre of a virtual whiteboard or flipchart. Ask the group doing the exercise to write down what they consider to be the benefits and drawbacks placing the respective sticky note in the corresponding side. Group identical notes together. You may wish to collect around a theme if the notes are similar. If you're scoring, total the scores. Use the output to inform whether or not to proceed with the change idea.

This tool is often used to shape a Creative Workshop. It's also a good way to co-design and co-produce change ideas with system users, those working in the system and stakeholders.

Useful links:

NHS Education for Scotland, Force Field Analysis



PARETO ANALYSIS

Why use it

To understand where most of the problems are and concentrate improvement efforts on the things that have the greatest impact.

What is it

According to the “Pareto Principle”, 80% of faults are associated with 20% of inputs. (Doesn’t always need to be faults, could be anything you want to measure.) A Pareto chart is a histogram with the addition of a cumulative percentage line illustrating the categories measured from largest to the fewest. The ordering helps identify the ‘vital few’ - the factors that warrant most attention. In the example on the right, three wards account for 80% of falls in a hospital. The hospital may look to focus improvement effort just in ward 24L or the top three making-up 80% of the falls.

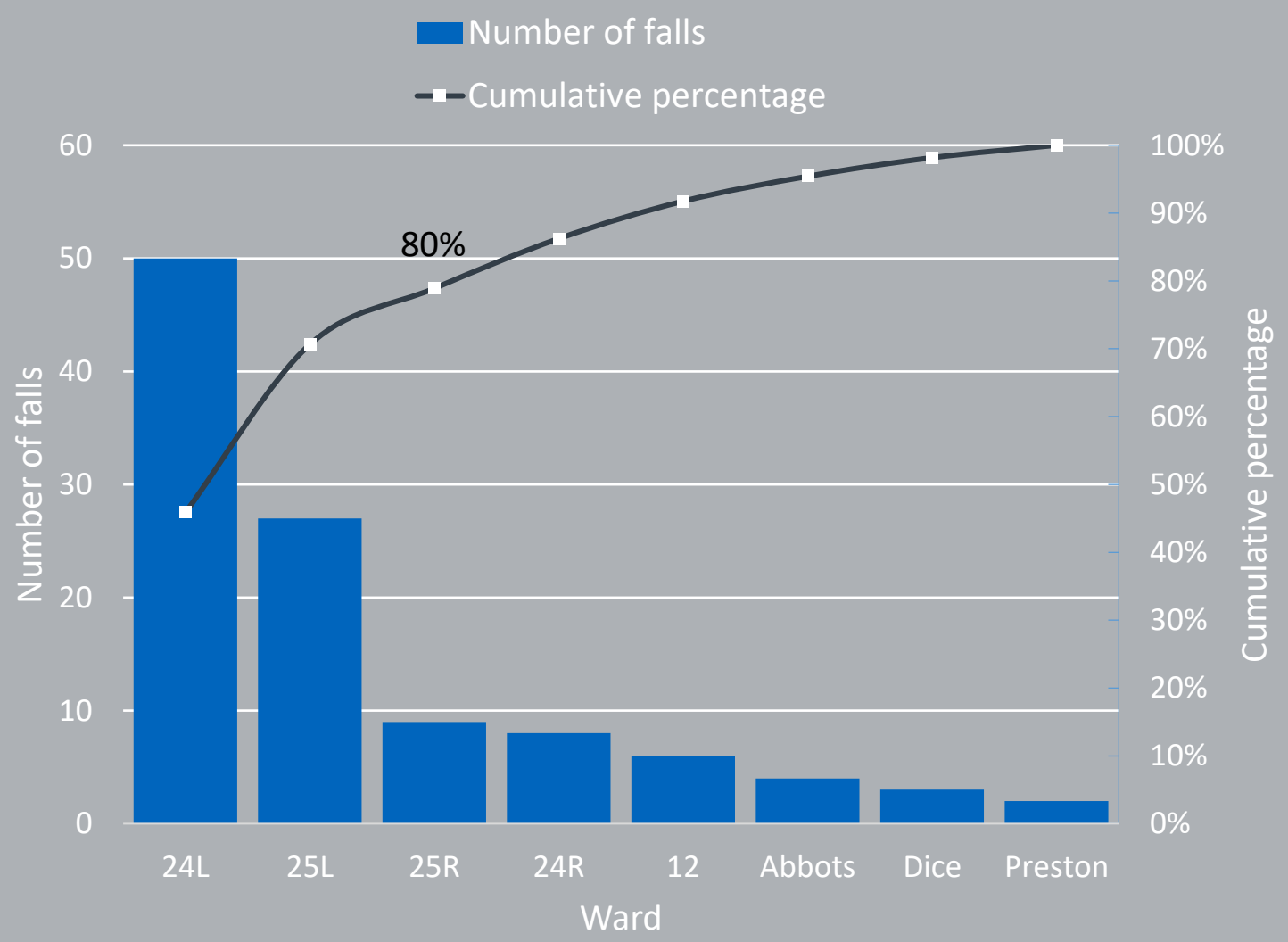
How to use it

You may already have collected data or need to gather specifically. Pareto charts work best if you have more than 30 observations across the categories graphed. Smaller numbers can be misleading due to random chance.

Open a Microsoft Excel spreadsheet and arrange the data in their categories, from those with the largest number to the fewest. Select the data then: select Insert > Charts > Histogram > Pareto. As with all other Excel charts, you can customise your Pareto chart to add a title, legend and format labels.

Useful links:

NHS Education for Scotland, Pareto Chart



PROCESS MAP

Why use it

To understand the activities/steps within a system and how they interrelate with one another.

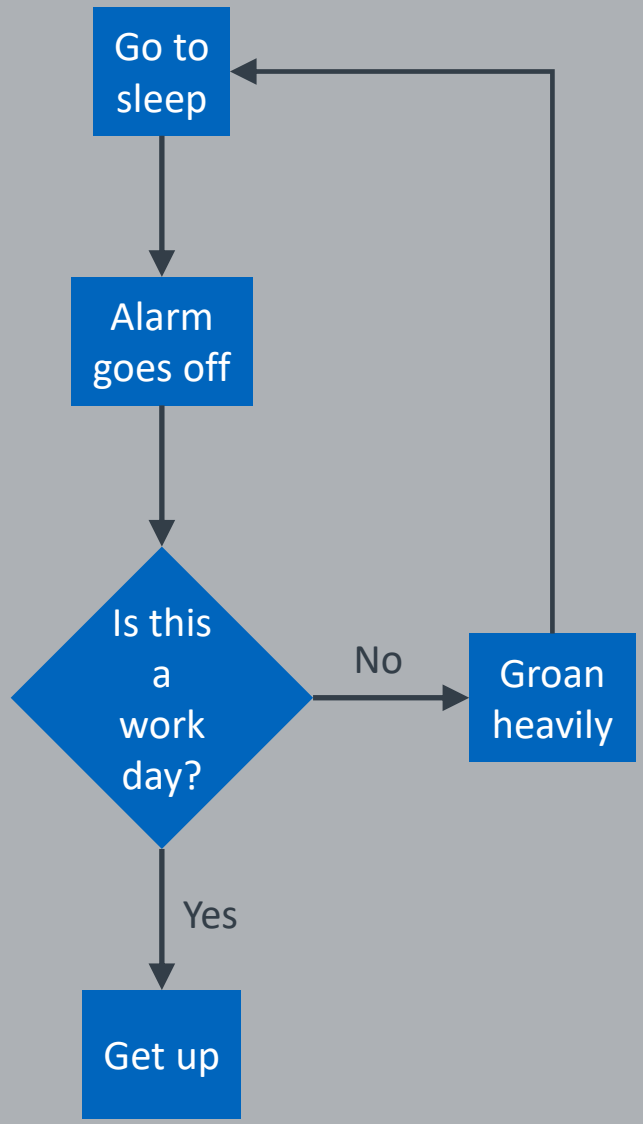
What is it

Used to develop a 'map' of activities within a system and how they interrelate with one another. By understanding the activities and interrelationships, problems can be easier to identify and areas for improvement ascertained.

How to use it

Often used as the basis of a Journey Map, the aim of process maps are to make things clear and provide insight. The best process map is often the simplest. There are different approaches to take - which one you choose will depend upon: what you need to know; what level you are working at (whole pathway or a small part of it); resources available and; timescales.

Like the simple high-level process map on the right, start with a high-level map of say 5 – 10 activities to help establish the scope of the system and identify significant issues. Then develop each to include any sub-activities and related steps, and provide a full picture of the system under consideration. Storyboards can be a useful way to collect information about connections which might not otherwise be obvious.



Useful links:

NHS Education for Scotland, Process Mapping

Why use it

To explore an issue from a number of different angles.

What is it

An interview technique that helps you hone in on a certain topic by asking a series of questions about different aspects of the matter under consideration.

A development of 5 Whys, this tool is a quick and easy way to start asking questions in a few different and simple ways. It makes it easier to think about the best way to get to the root cause of a problem and reach the heart of complex issues.

How to use it

Use the questions on the right to explore an issue with individuals or a group of people. Use it in conjunction with Storyboards if used to capture person insights and Define The Problem to explore in different ways and from a number of different angles. Use it also to help define the wider context and associated issues involved.

Useful links:

nesta, Question Ladder

QUESTION LADDER

	Is	Did	Can	Will	Would	Might
Who	Who is	Who did	Who can	Who will	Who would	Who might
What	What is	What did	What can	What will	What would	What might
Where	Where is	Where did	Where can	Where will	Where would	Where might
When	When is	When did	When can	When will	When would	When might
Why	Why is	Why did	Why can	Why will	Why would	Why might
How	How is	How did	How can	How will	How would	How might

STAKEHOLDER MAP

Why use it

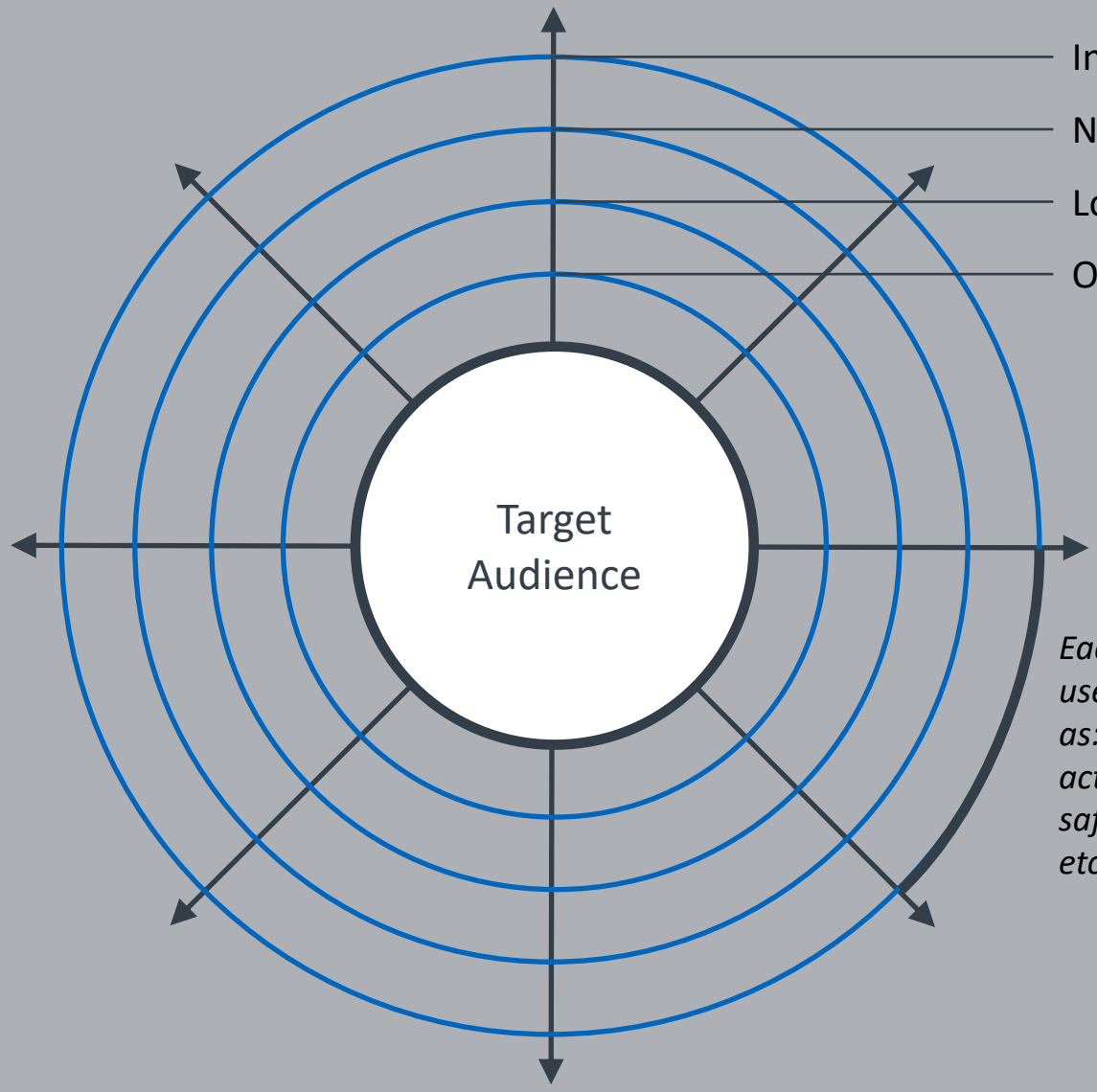
To understand the stakeholders in the system under consideration and how they relate to one another.

What is it

Based on the original Stakeholder Spidergram developed by the Helsinki Design Lab and further inspired by the Stakeholder Mapping tool by Namahn & Yellow Window, the Stakeholder Map provides an overview of all the different individuals and organisations involved in the system under consideration and how they relate to one and other.

How to use it

Use the template on the right by identifying your target audience. Work your way from the centre towards the outer layers, mapping the people and organisations involved in the system under consideration and how they relate to one another. It might be useful to colour-code the people and organisations to signify importance (i.e., directly influence to just require a general awareness). Once completed, the information will help identify who requires the most attention and who only needs to be kept informed. Storyboards can be a useful way to collect information about stakeholder connections which might not otherwise be obvious.



Each section can be used for topics such as: belonging; self-actualisation; health, safety environment, etc.

VALUE MAP

Always important	Sometimes important	Rarely important	Never important
INDIVIDUAL VALUES			

Always important	Sometimes important	Rarely important	Never important
ORGANISATION VALUES			

Always important	Sometimes important	Rarely important	Never important
SYSTEM VALUES			

Why use it

To understand the values which drive behaviour in people, organisations and systems.

What is it

Value Mapping helps you understand the values which are embodied in your personal, organisational and system work. Values influence what you, your organisation and wider system do. Once defined, they can be shared and act as a common reference point that simplifies and speeds-up decisions and ensure consistency around improvement work. It can also be a useful way to bring people together by having those involved align their individuals' values with that of their organisation and system.

How to use it

Use the template on the right to individually write down on a sticky note (virtual or paper) what's most valuable to you, your organisation and system you want to improve. Capture as many as you can (ideally 10 or more) - even those you are aware of but are less important to you. Place your sticky notes in the relevant fields in the template, having a minimum of five in the 'Always important' field. Ask two people to share, compare, contrast their work and prepare a combined map. Do the same again but next time for four people and then again for everyone. The output can be cross referred to any Culture Map, Empathy Map, Experience Map or ISM to validate or challenge the findings.

Useful links:

nesta, Value mapping

STAKEHOLDER VIEWS (Pig Model)

Why use it

To map and gather multiple perspectives of stakeholders in one place to help discuss the different perspectives of a problem.

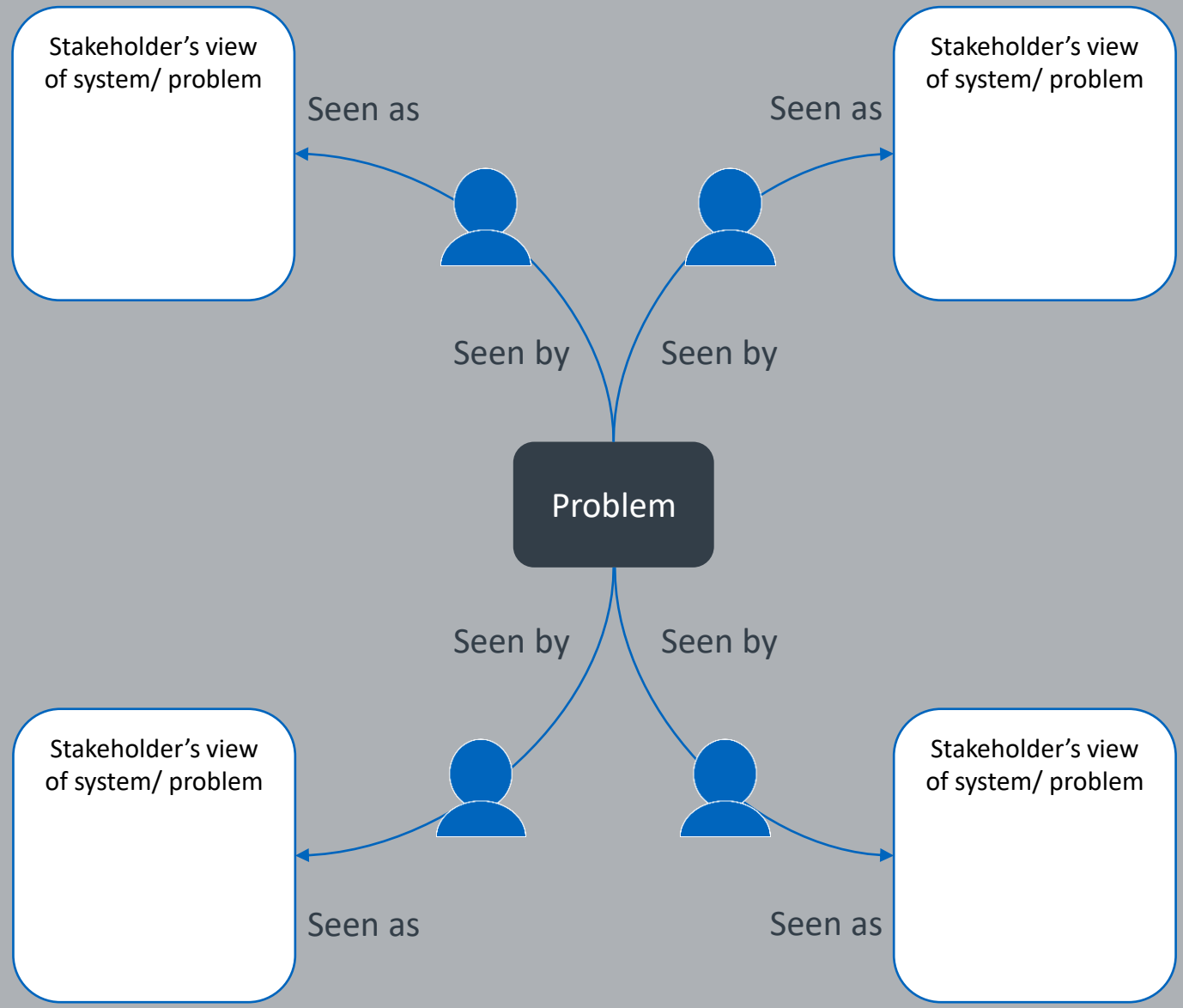
What is it

Based on an original pig example provided by Gareth Morgan and adopted by the Defence Science and Technology Laboratory. The tool helps gather a variety of stakeholder views which can be used to challenge and clarified through further stakeholder engagement. Use alongside Stakeholder Mapping if you want to collect a range of views/ themes.

How to use it

Write problem in the middle of a page. Analyse as currently is or what's needed for it to be resolved. As a minimum, identify the people who receive service (e.g., the public), the people working in the system and those who have influence to initiate or prevent change (e.g., politicians, civil servants, experts, funders, etc.)

You can create a quick overview yourself and check with stakeholders to see if you've captured their views correctly. Ideally though, co-produce with stakeholders and continually review as you move from where you are to where you want it to be.



Useful links:

Morgan. G, 1997. Imaginization: New Mindsets for Seeing, Organizing, and Managing, Berrett-Koehler publishers, Inc. San Francisco

GOV.UK, An introductory systems thinking toolkit for civil servants, Tool 2

I want to…

Develop aim and change theory

by developing a theory of change

DRIVER DIAGRAM

by aligning inputs and activities to outcomes

LOGIC MODEL

Why use it

To set-out your theory of change aligning improvement work to a desired state.

What is it

The Driver Diagram is a method for setting out, on one page, what it is you want to improve and how you will do it. It can be used to scope the national policy intent and cascaded locally, or just used locally if the local system objective is clear.

The aim should be short, clear and specific, setting-out what you want to improve and by when. Flowing from the aim are the main improvement building blocks (Primary drivers) needed to achieve the desired outcome (e.g., changes in culture, processes, technology, etc). Specific planned changes are then identified to show what, collectively, needs to happen to deliver the Primary drivers. Ideas for change are devised and tested locally.

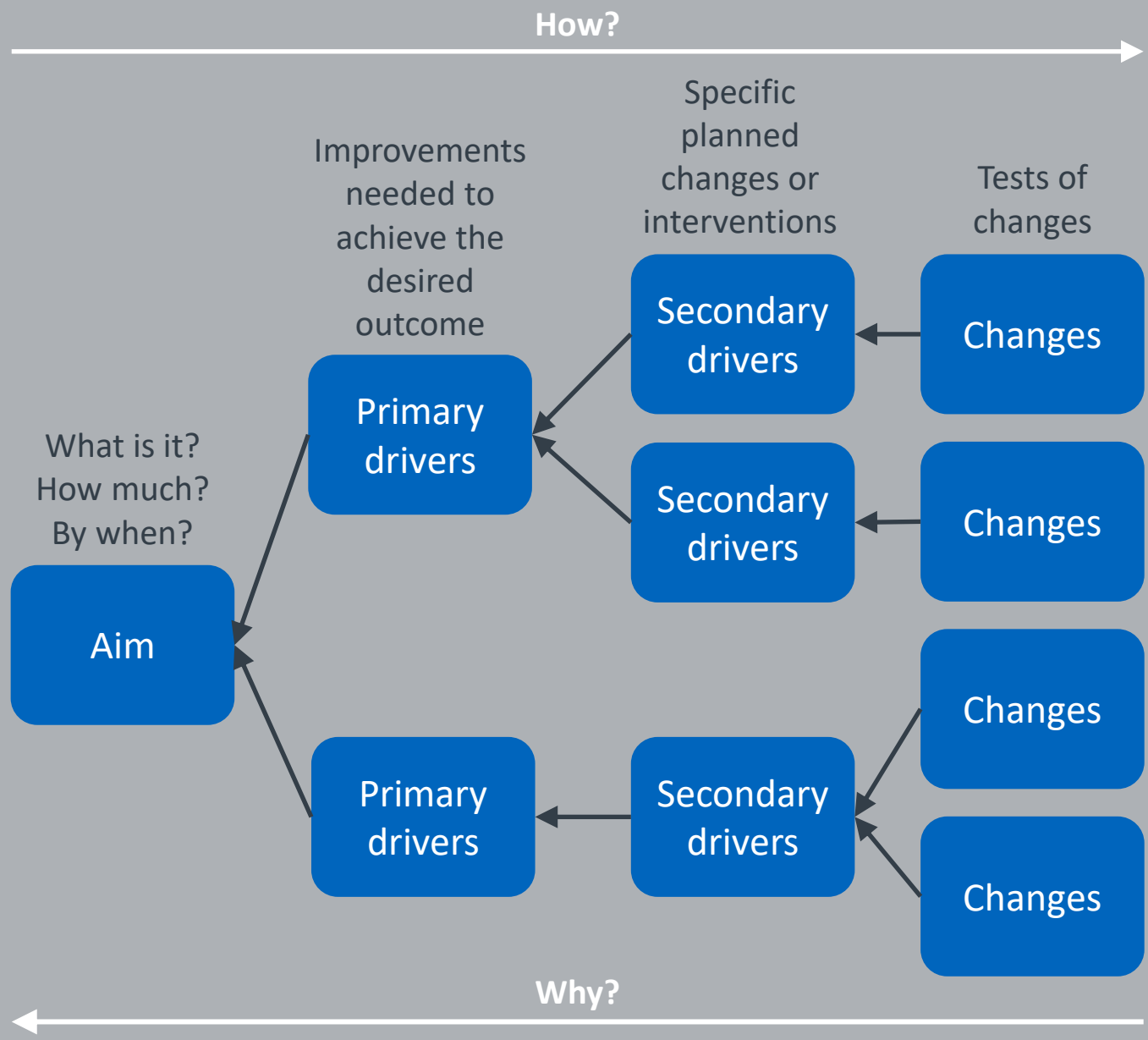
How to use it

Use the template on the right and work with system users, those working in the system and stakeholders to co-design and produce your driver diagram. Start with the aim and build a consensus on what improvement you want to make and by when. Next identify your Primary and Secondary drivers. Use the tools identified in Specific Change Ideas to help scope what potential changes you want to test. Use the Model for Improvement to test change ideas locally.

Useful links:

NHS Education for Scotland, Driver Diagram

DRIVER DIAGRAM



LOGIC MODEL

Why use it

To align inputs (budgets, people & equipment) and activities to desired outcomes.

What is it

It tells the story of your improvement work in a diagram using a few simple words. It shows a causal connection between the need you have identified; what you do and how this makes a difference for individuals, and communities.

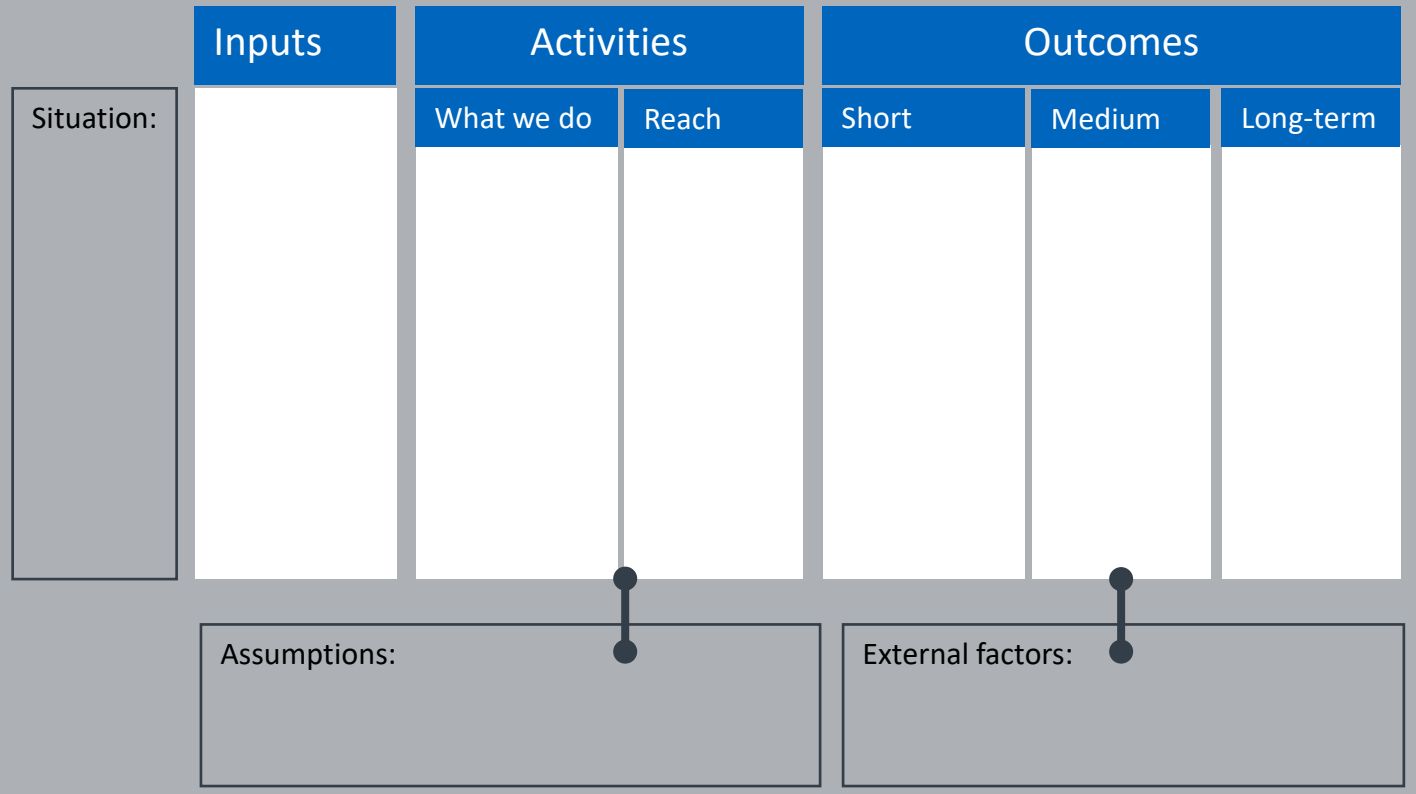
There are a number of different forms of logic model, the one on the right is a commonly used template produced by the University of Wisconsin.

How to use it

Use the template on the right and work with system users, those working in the system and stakeholders to co-design and produce your logic model. If known, it can be beneficial to prepopulate the Situation, Assumptions and External factors boxes beforehand. Do the same for Outcomes if these too are also known. Go between Inputs, Activities and Outcomes to produce your logic model.

Useful links:

Logic Model: [ESS Evaluation Tool: Interactive Logic Model Template - Evaluation Support Scotland](#).



I want to…

Identify specific change ideas, test and refine using PDSA

by experiencing and solving problems

CREATIVE WORKSHOP

by thinking differently

FAST IDEA GENERATOR

by understanding what will be most effective

IMPROVEMENT TRIGGERS

by bring ideas to life

INNOVATION FLOWCHART

by testing under a range of conditions

MODEL FOR IMPROVEMENT

PDSA

by evaluating what change ideas to test first

PRIORITISATION MATRIX

by thinking about ideas from different perspectives

SIX THINKING HATS

by evaluating ‘do nothing’ against other options

SWOT ANALYSIS

CREATIVE WORKSHOP

Why use it

To generate change ideas based on the thoughts and experiences of system users, those working in the system and stakeholders.

What is it

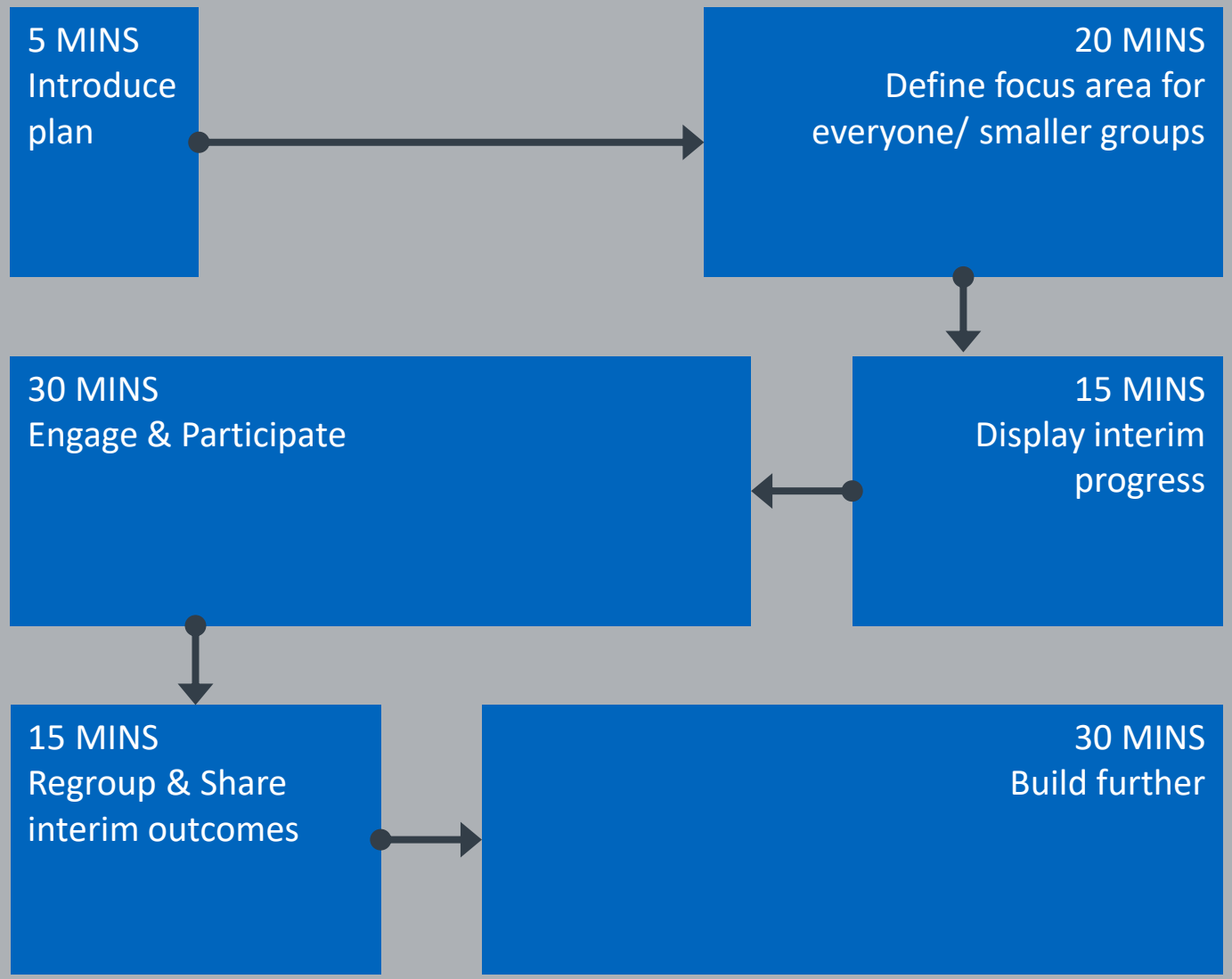
Brings system users, those working in the system and stakeholders together to collaborate on your improvement work and generate/ explore potential ideas for change. It's a good way to both collect and share different experiences, and co-produce potential solutions. Creative Workshops can provide invaluable insights into people's perspectives on particular issues. They offer an opportunity to share this information as soon as it's gathered, although this needs careful planning to avoid any hostages to fortune!

How to use it

Use the template on the right to help you plan your Creative Workshop. This is only an example, feel free to adjust, amend or completely rearrange to suit your audience and situation. Change ideas must though support your change theory set-out in your Driver Diagram. Think about using tools such as Fast Idea Generator, Force Field Analysis and Six Thinking Hats to generate innovative thinking. You might also want to reverse any Cause & Effect analysis completed as part of Understand System and develop solutions to problems identified.

Useful links:

nesta, Creative Workshop



Why use it

To generate change ideas from a range of perspectives using an innovative thinking technique.

What is it

This tool allows a team to generate ideas by looking at a problem or opportunity from a range of perspectives. Comprised of seven approaches or challenges, you can choose the change ideas that most suits the improvement under consideration. The Fast Idea Generator helps frame ideas to different scenarios and stretches thinking to stimulate discussion and further strengthen your change idea.

How to use it

Focusing on the improvements needed to deliver your improvement aim set-out in your Driver Diagram. Use the seven steps outlined in the worksheet on the right to generate potential change ideas. Review the ideas generated and select which ones you would like to test. Use the Model for Improvement to test, build knowledge and implement change ideas under a range of conditions which have shown to deliver sustained improvement. This tool could be used as part of a Creative Workshop and alongside the Improvement Triggers tool.

Useful links:

nesta, Fast Idea Generator

FAST IDEA GENERATOR

THE APPROACH		THE NORMAL ROLE	BENDING, BREAKING, STRETCHING THE ROLE
Inversion	Turn common practice upside down		
Integration	Integrate with something else		
Extension	Extend to include something else		
Differentiation	Segment		
Addition	Add a new element		
Subtraction	Take something away		
Translation	Learn from a known practice elsewhere		
Grafting	Introduce something from elsewhere		
Exaggeration	Amplify something to its extreme		

IMPROVEMENT TRIGGERS

Why use it

To identify potential change ideas which might not normally be identified and considered.

What is it

A collection of thoughts which can be used to inspire innovative thinking around potential change ideas. Inspired by the tool 'SCAMPER' (Eberle B. 1997), these questions are designed to provoke new ways of thinking and open minds to new solutions which might not normally be considered.

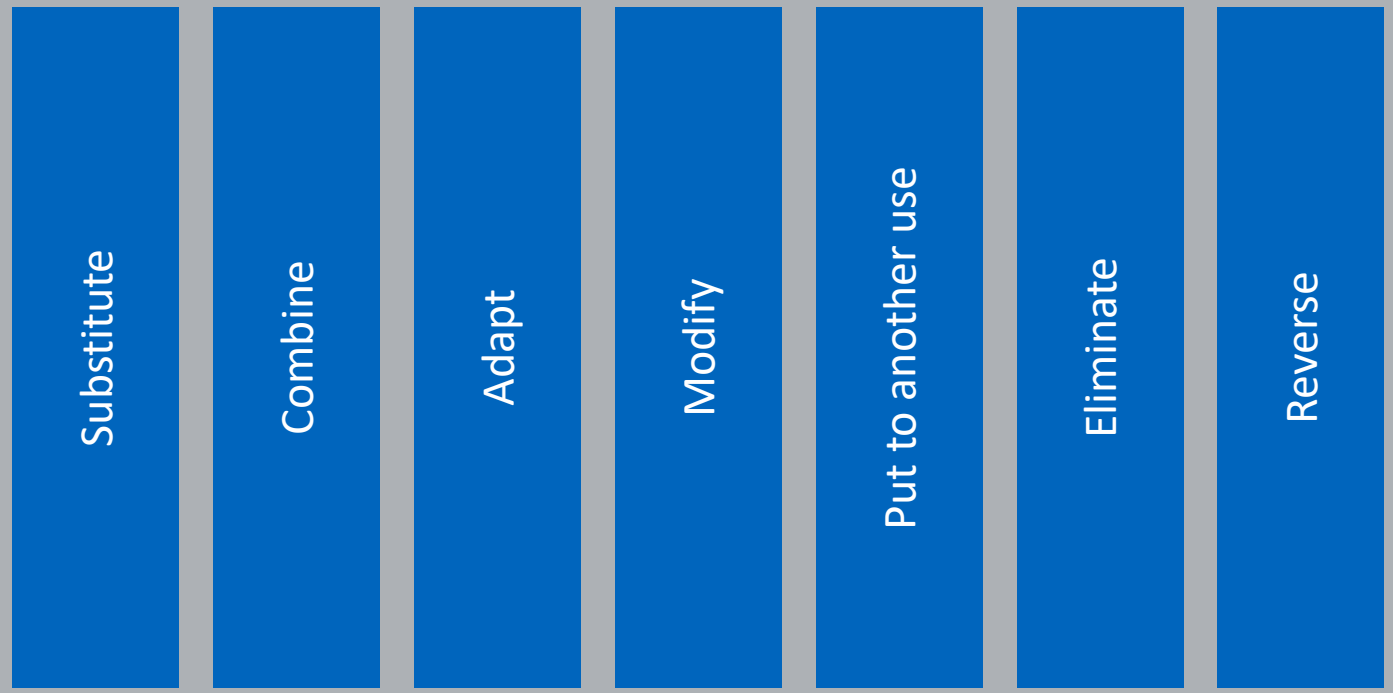
How to use it

Use the seven triggers on the right to provoke thoughts about potential change ideas. Write the triggers on a virtual whiteboard or flipchart. Ask the group doing the exercise to write down on sticky notes what thoughts come to mind when they think about each trigger in the context of the improvement under consideration. Place the sticky notes in the corresponding box, grouping and theming where necessary. Use the information to shape the change ideas you want to test.

This tool can be used to shape a Creative Workshop. It's also a good way to co-design and co-produce change ideas with system users, those working in the system and stakeholders.

Useful links:

nesta, Improvement Triggers



Why use it

To systematically work through and develop a change idea.

What is it

Gives a detailed overview of the various stages in an innovation process, listing the activities, requirements and objectives of each stage. These include an overview of the different people, skills, activities and finances needed to test a particular change idea and start thinking about scale and spread should you implement the change.

How to use it

Use the worksheet on the right to systematically work through each of the seven stages to develop your change idea. It can be used alongside the Model for Improvement to plan PDSAs (Plan-Do-Study-Act) and Scaling Plan should you want to apply the learning elsewhere.

Useful links:

nesta, Innovation flowchart

INNOVATION FLOWCHART

STAGE	SPECIALIST SKILLS REQUIRED	EXAMPLE ACTIVITIES & TOOLS	RISK LEVEL AND HANDLING	FINANCE REQUIRED	EVIDENCE GENERATED	GOAL
1. Exploring opportunities & challenges						
2. Generating ideas						
3. Developing & testing						
4. Making the case						
5. Developing & implementing						
6. Growing, scaling and spreading						
7. Changing systems						

Why use it

To make sure the changes you want to test support your aim and change theory.

What is it

A simple but effective tool that links the change ideas you want to test back to your aim and change theory (i.e. Driver Diagram). This is important as we know that not all change leads to improvement.

How to use it

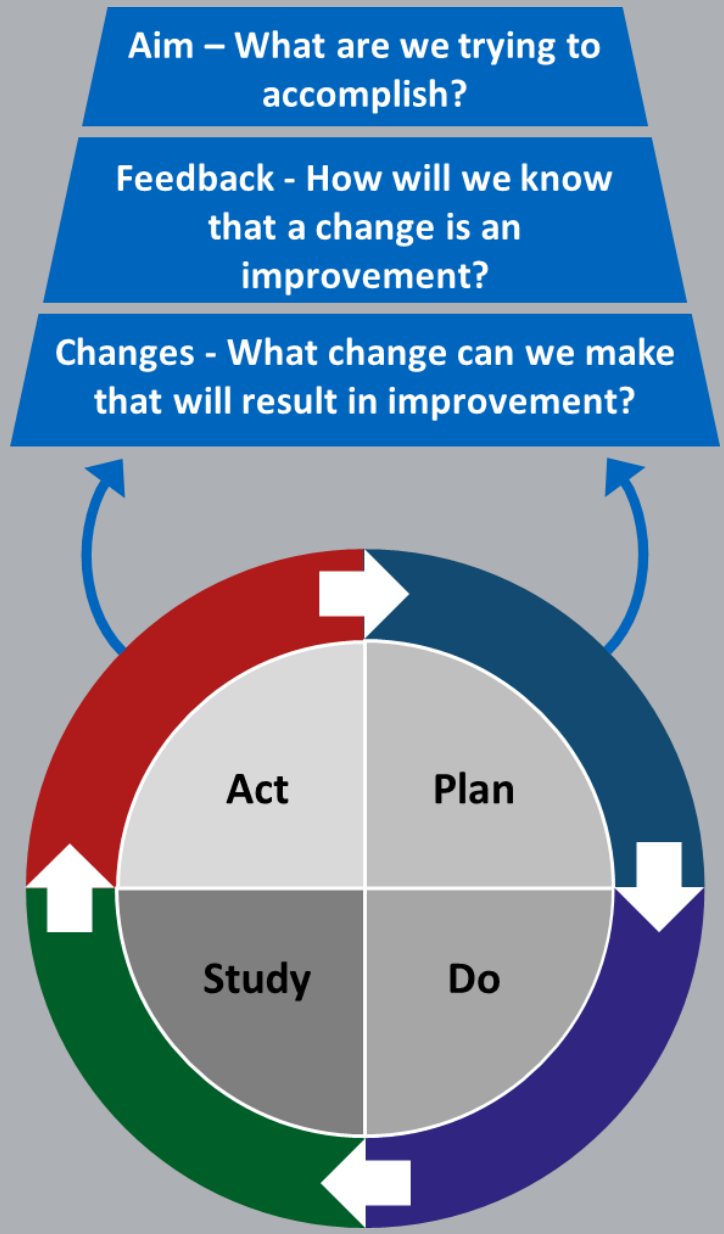
Use the model on the right to make sure you anchor the change ideas you want to test back to your aim and change theory. Plan the change you'd like to test; try it, observe the results, and act on what you've learned, either by testing again under different conditions or move to implement if successful. Undertaking rapid/ multiple PDSA tests to learn and build knowledge increases the chances of success.

Think about using tools such as Fast Idea Generator, Force Field Analysis and Thinking Hats to generate change ideas. You might also want to reverse any Cause & Effect analysis completed as part of Understand System to generate change ideas. Consider using the Innovation Flowchart to develop and plan your change ideas. Test and build knowledge under a range of conditions and only implement changes once you're confident the change will lead to sustained improvement. Measure performance over time to understand when the change is optimised and inform whether future intervention is necessary.

Useful links:

NHS Education for Scotland, Model for Improvement

MODEL FOR IMPROVEMENT



PLAN-DO-STUDY-ACT (PDSA)

Why use it

To learn and build knowledge through testing potential change ideas under a range of controlled conditions. Implementing a change which has been properly tested increases the chances of success and reduces the prospect of failure.

What is it

A PDSA is a structured four-step cycle which requires effort and discipline. Each test should be recorded so learning can be studied and shared. Each PDSA looks to answer some fundamental questions: What questions do you need answered? What are your predictions? Who needs to be involved? What are you going to measure? What tasks need to be done to allow the test to take place? Did what actually happen align with your predictions? What are you going to do next?

How to use it

Use PDSAs as part of the Model for Improvement to make sure that what you're testing supports your aim and change theory (i.e., Driver Diagram). Use one of the freely available templates (others available by emailing: lit@gov.scot) to plan what you want to test; document results, and; share learning.

Most improvement projects will involve several tests of a variety of change ideas. Each idea may require several cycles of testing to build knowledge and confidence.

Useful links:

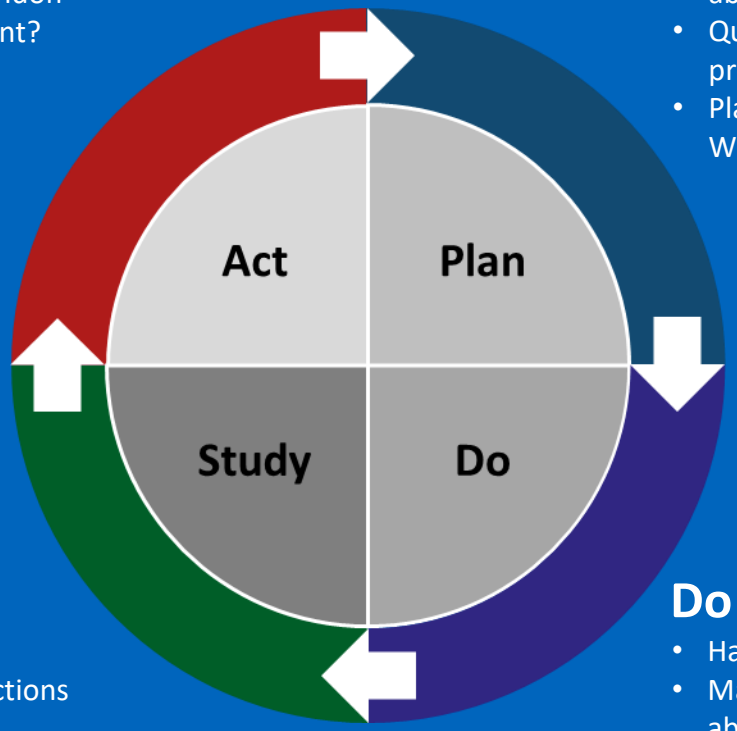
NHS Education for Scotland, (undated), PDSA

Act

- Make decisions about what to do next
- Adopt, adapt, abandon
- Ready to implement?

Plan

- Have a clear objective
- Make some predictions about what will happen
- Questions and predictions
- Plan to carry-out: Who? When? How? Where?



Study

- Analyse data
- Compare to predictions
- Summarise
- Use knowledge to update your theory about this change

Do

- Have a clear objective
- Make some predictions about what will happen
- Questions and predictions
- Plan to carry-out: Who? When? How? Where?

PRIORITISATION MATRIX

Why use it

To help decide which change ideas to test first.

What is it

The Prioritisation Matrix is a structured visual tool to help you decide which improvement ideas to test first and how to focus your activity and energy. It works best in a collaborative environment and can help to build will and communicate why you have chosen to test certain ideas before others. They come in many different forms but the simplest and easiest to use is the template on the right.

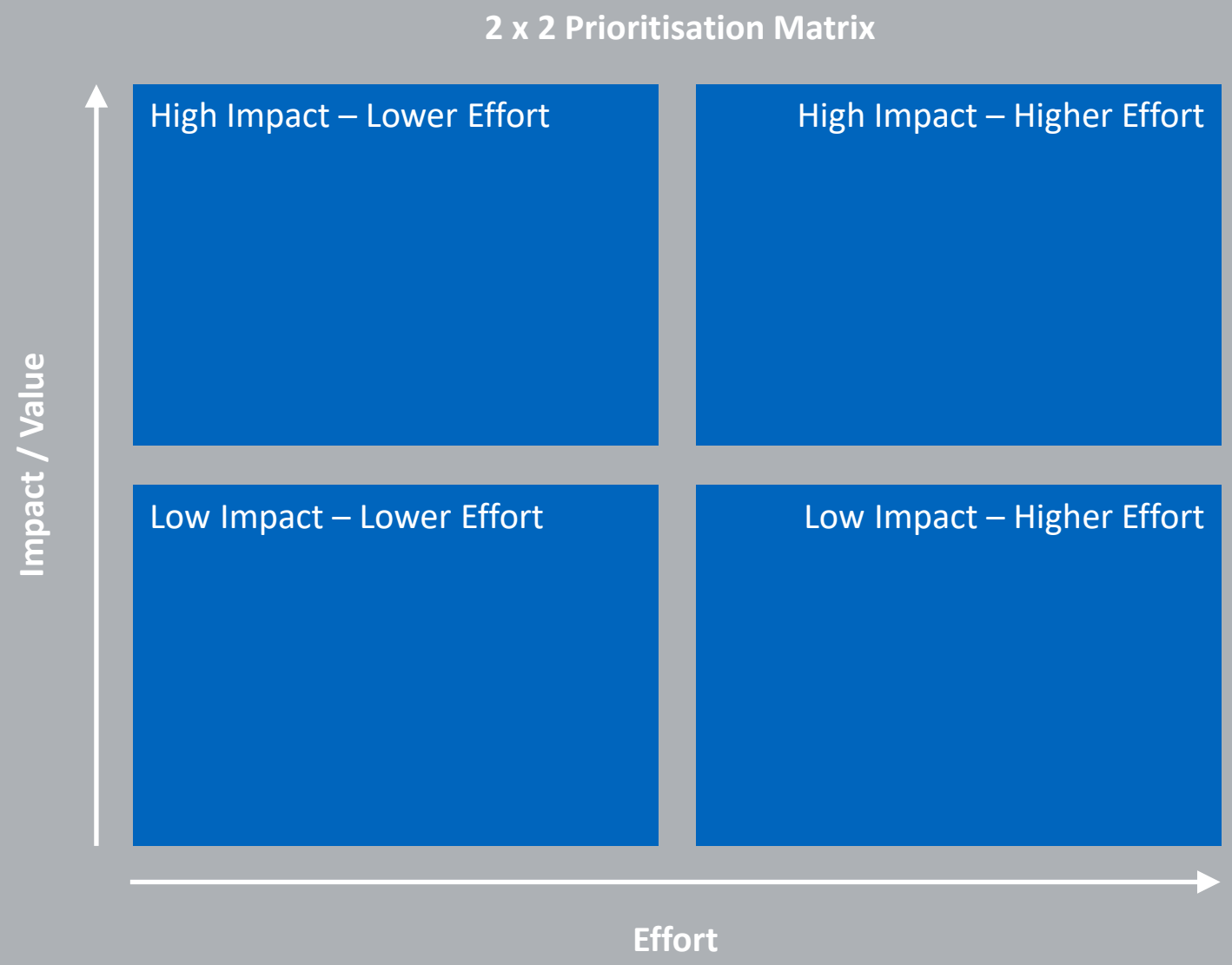
How to use it

Draw the matrix on a virtual whiteboard or flipchart. Ask the group doing the exercise to write down on sticky notes their improvement ideas. As a group, place the sticky notes in the appropriate quadrant. The improvement ideas in the top left are your quick-wins. Moving to the top right requires more effort. Think carefully if you really want to test those change ideas having low impact.

Think about using this tool as part of a Creative Workshop. Use tools such as Fast Idea Generator, Improvement Triggers, and Six Thinking Hats to generate change ideas.

Useful links:

NHS Education for Scotland, Prioritisation Matrix



Why use it

To generate change ideas from a range of perspectives using an innovative thinking technique.

What is it

Allows a range of different perspectives to be brought into a discussion while keeping the focus on the topic at hand. Developed by Edward De Bono (1985) it's a technique which generates innovative thinking and change ideas which might not otherwise be considered.

People consider potential improvements from different perspectives. Each hat is a different perspective representing a particular viewpoint. It's a good tool for bringing people together and creating the conditions for change.

How to use it

Use the template on the right and generate a virtual whiteboard or flipchart showing the six hats. Ask people to 'wear' the same or different hats at the same time to generate potential change ideas. Ask people to write down their thoughts on sticky notes and capture these within the respective hat column. Use the information collected to generate change ideas. This tool could be used as part of a Creative Workshop. Use alongside your Driver Diagram and Model for Improvement to make sure change ideas identified for testing support your aim and change theory.

Useful links:

The de Bono Group, (undated), Six Thinking Hats

SIX THINKING HATS

Planning

Creativity

Facts

Feelings

Benefits

Risks

SWOT ANALYSIS

Why use it

To maximise the strengths and opportunities of a change idea and minimising any weaknesses and threats.

What is it

SWOT stands for Strengths, Weaknesses, Opportunities and Threats. A SWOT Analysis can be used to consider a change idea in more detail, or more broadly for a specific project, organisation or even a whole sector.

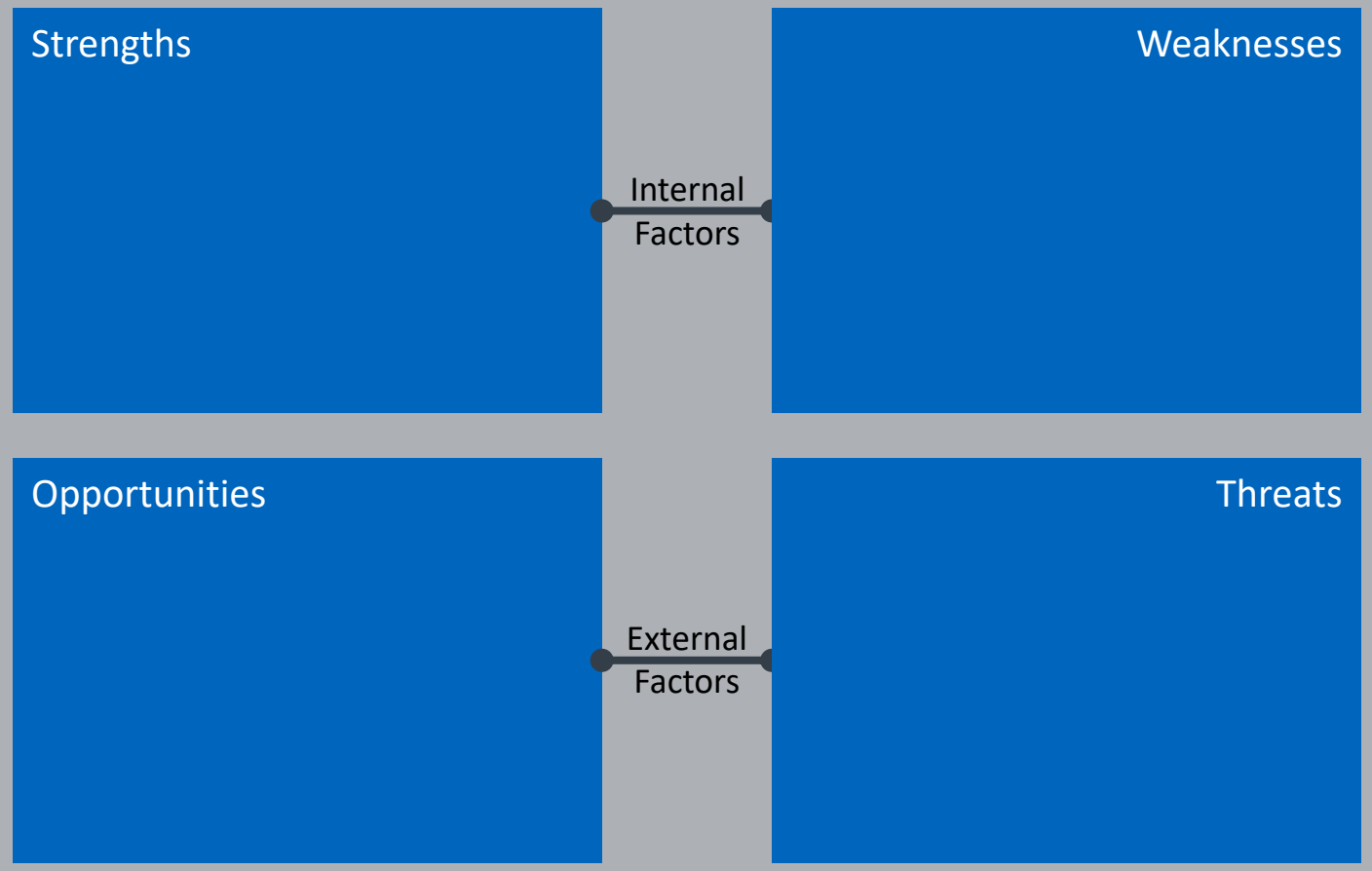
Completing an improvement SWOT Analysis involves exploring a change idea in more detail before testing. This can help inform the planning stage of a PDSA test cycle (see Model for Improvement).

How to use it

Use the template on the right and fill out the four quadrants according to what you see as being the strengths, weaknesses, opportunities and threats associated with your change idea. Think about how you might maximise the strengths and opportunities while minimising the weaknesses and threats.

Useful links:

nesta, SWOT Analysis



I want to…

Implement and sustain where tested

by continuing to test under a range of conditions

MODEL FOR IMPROVEMENT

PDSA

by measuring performance over time

MEASUREMENT

Key element

MEASUREMENT

Why use it

To know whether or not performance after implementation is being sustained/improved.

What is it

A simple Run Chart (minimum of 10 to 15 data points) illustrating actual performance and the types of variation experienced over time. For a minimum 15 to 18 data points (ideally 20 or more) a Control Chart as shown on the right having the addition of upper and lower control limits.

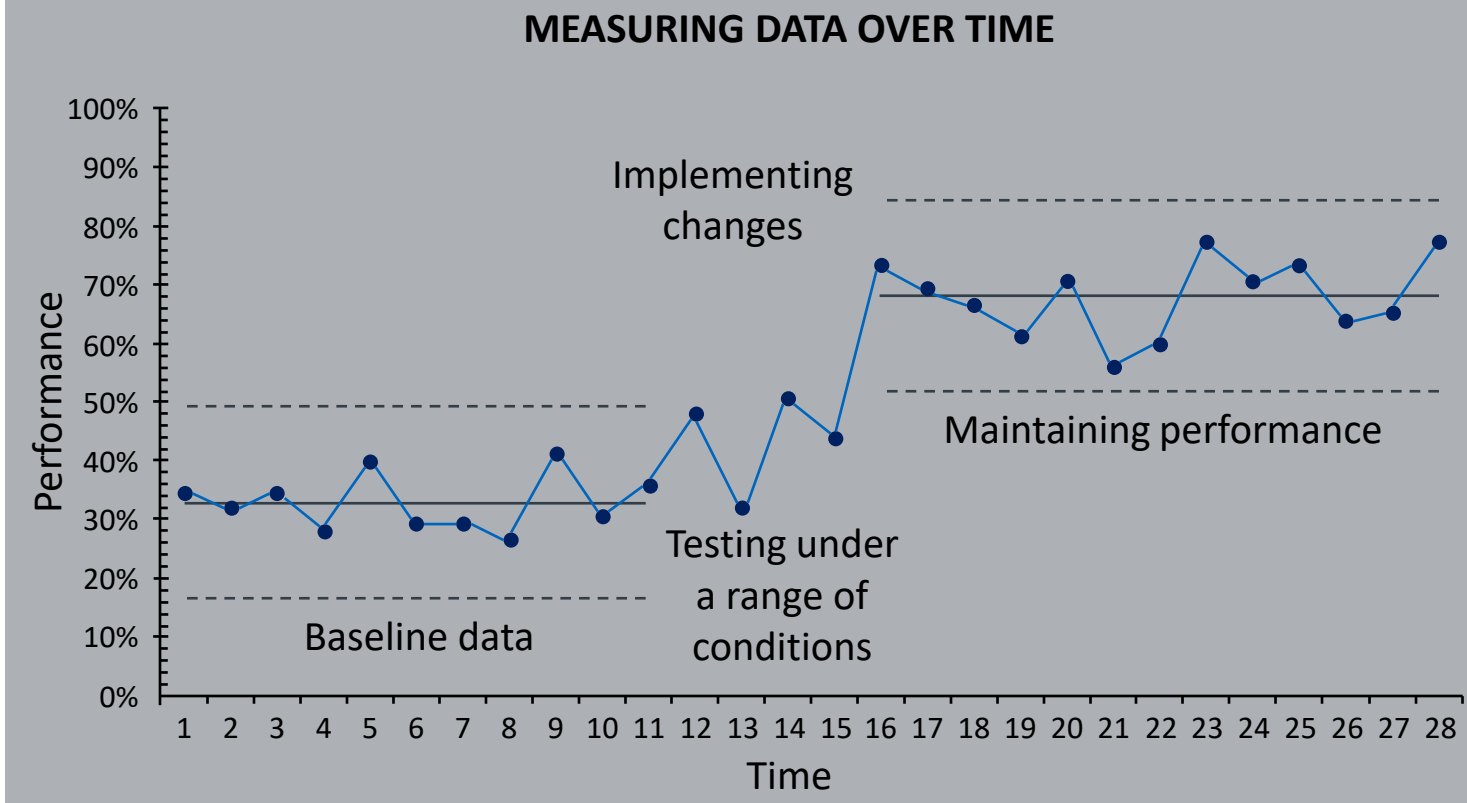
Ideally, performance data should be triangulated and verified with qualitative feedback, preferably from the user experience or those working in the system and stakeholders. Measures should be clearly set-out in a measurement plan and include outcome, process and balancing measures.

How to use it

A simple Run Chart can be created on Microsoft Excel if you have collected the minimum number of data points. Add the data to a worksheet the select: Insert > Charts > All Charts > Line. Speak to your Improvement Adviser if you have sufficient data and want to produce a Control Chart. This requires an Excel add in (QI Charts).

Useful links:

NHS Education for Scotland, (undated), Run Chart
NHS Education for Scotland, (undated), SPC Chart



I want to…

Share learning and spread where relevant

by using your improvement work to inform what to do next.

LEARNING LOOP

by exploring different ways of doing things

SCALING PLAN

by knowing the pitfalls

SEVEN SPREADLY SINS

Why use it

To learn whether the change implemented has, and continues, to deliver improvement.

What is it

A tool that helps you to define how the improvement work you do now informs what you need to do next. It provides a high-level perspective on how implementing change can be delivered in much the same way as PDSAs under the Model for Improvement and through learning cycles.

The Learning Loop on the right inspired by the Learning Plan from IDEO (2011) describes four different stages that your improvement work might pass through in a cycle of continuous improvement. Using this tool can help understand the different phases involved when trying to implement your change ideas. By reflecting on the process involved, it can help you understand what to do next.

How to use it

Use the Learning Loop on the right to build knowledge on whether your system is learning from changes implemented. Collect information and data on each of the four areas (can be collected in any order) to verify whether the change is delivering sustained improvement.

LEARNING LOOP

Why use it

To plan how you scale and spread an improvement found to work in one area to another.

What is it

You might want to scale and spread improvements implemented in one locality to another. It's very unusual to be able to copy what works in one area to another given that local conditions, culture, processes, etc. will be different. The worksheet on the right provides a number of questions you should consider where developing a scale and spread plan. It will help you develop a shared vision on scaling-up, while assessing resources and whether your system is ready to take the next step. Based on the assessment of the situation, you can then decide your readiness to scale; what aspects need strengthening, and what aspects need more work.

How to use it

Use the worksheet on the right to develop a Scaling Plan with people who first implemented the change and with those who want to apply the learning in their area. The tool can form the basis of a Creative Workshop. Use information gathered under the Learning Loop to inform and evidence your plan. Try to be open, thorough and inquisitive. The more detailed answers you give, the deeper your understanding of the situation will be.

Useful links:

nesta, Scaling Plan

SCALING PLAN

Need & Capability

Is there a clear need for the improvement elsewhere?
Is the capability in place to scale and spread? Are communities of practice in place that will allow learning to be shared?

People & Governance

What are the skills of the key people? Are they fit for purpose?
How does accountability and governance need to change?
Is there a clear choice on the how the system can change?
Is leadership across the system capable of focusing on improvement?

Knowledge

Are the systems/ processes capable of operating at a higher volume or capable of expansion?
Is all the knowledge needed to scale and spread available?

Confidence & Connectedness

Can you show evidence the improvement implemented can be scaled and spread?
What confidence do users, people working in the system and stakeholders have in the improvement?
What social connectors can you call upon to champion the change in the area(s) you want to spread to?

Resources

Are the resources necessary for expansion readily available, affordable and controllable?
Is the timing for demand and supply chains at larger scale clear and can support be matched?

Why use it

To avoid common pitfalls when scaling and spreading improvement.

What is it

A helpful checklist produced by the Institute of Healthcare Improvement (2010) on the Dos and Don'ts when developing a scale and spread plan.

How to use it

Use the information on the right to help shape your Scaling Plan.

Useful links:

Institute of Healthcare Improvement (undated), IHI "Seven Spreadly Sins"

SEVEN SPREADLY SINS

	DON'T	DO THIS INSTEAD
1	Bother testing – just do a large pilot	Start small, aim big and build knowledge through testing
2	Get one person to do it all	Make spread a team effort
3	Rely solely on vigilance and hard work	Work smarter by listening to users and learning from data
4	Copy what worked in one area to another	Apply learning to develop local solutions
5	Make the initial improvement team responsible for spread	Build a network of improvers who share learning
6	Check data and information quarterly	Check data and information frequently to adapt spread plan
7	Expect huge improvements quickly then spread right away	Verify and double check improvements before scaling and spreading

GATEWAY REVIEW

Why use it

To receive an independent assessment at key points in the lifecycle of a programme or project.

What is it

Traditionally used for major capital infrastructure projects, Gateway Reviews (GRs) are now commonly used for programmes or projects carrying a high-risk score. They ARE NOT audits. Review reports provide independent assessment confirming, in the view of the Review Team (RT), whether the programme/project is on track to deliver its intended purpose or if corrective action is necessary.

Commissioned by the Senior Responsible Owner (SRO) programmes follow Gate Review 0: Strategic Assessment. Projects follow the Five Case Business Case Model: Gate Review 1: Business Justification, Gate 2: Delivery Strategy, Gate 3: Investment Decision, Gate Review 4: Readiness for Service and, Gate Review 5: Operations Review & Benefit Realisation.

Depending on programme/project size, GRs are normally conducted over a 3-day period. The RT will normally interview around 12 people involved on the first 2-days. They will then write a report in the morning of Day 3 and present their findings to SRO in the afternoon.

How to use it

Complete the Risk Potential Assessment Form at initiation of a programme/project. Liaise with the SG Portfolio, Programme and Project Assurance Branch if the project score is high risk or you just want to discuss opportunities for commissioning project assurance reviews.

Programmes:

Gate Review 0:	Gate Review 0:	Gate Review 0:	Gate Review 0:	Gate Review 0:
Strategic Assessment	Strategic Assessment	Strategic Assessment	Strategic Assessment	Strategic Assessment

Projects:

Gate Review 1:	Gate Review 2:	Gate Review 3:	Gate Review 4:	Gate Review 5:
Business Justification	Delivery Strategy	Investment Decision	Readiness for Service	Operations Review & Benefit Realisation