Process Mapping

What is it?

A **process** is a series of actions or steps taken in order to deliver a service or product to a customer.

Process mapping techniques are quick and simple methods that are used to show the links between actions or steps of the process.

Process maps are created at differing levels of granularity:

- strategic 'big picture' system level maps
- an end-to-end process mapped out into current state maps
- detailed 'sub-process' or task maps

Benefits at a glance….

- a visual method of showing the relationships between the different parts of the process
- Helps to identify and develop opportunities for improvement
- can be used to audit the 'customer experience' and identify value and any obvious waste in the process
- use it to create a shared understanding of the 'current state' of the process and a co-created 'future state'
- facilitates the creation of a standardised approach where departments have been doing similar things in very different ways

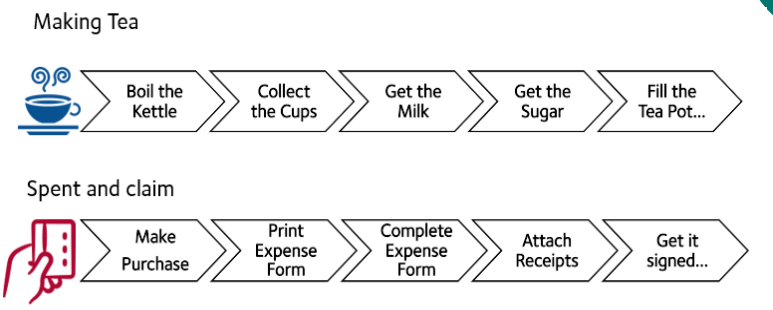

Figure 1: Two simple processes

When to use it?

It makes sense to benchmark the 'current state' before looking to improve it and whatever you *think* the process is, it is likely to be very different to what it *really* is as illustrated in Figure 2. Physically mapping out the process can help to flush out process bottlenecks and other interruptions to the flow of the process that negatively impinge on the customer experience.

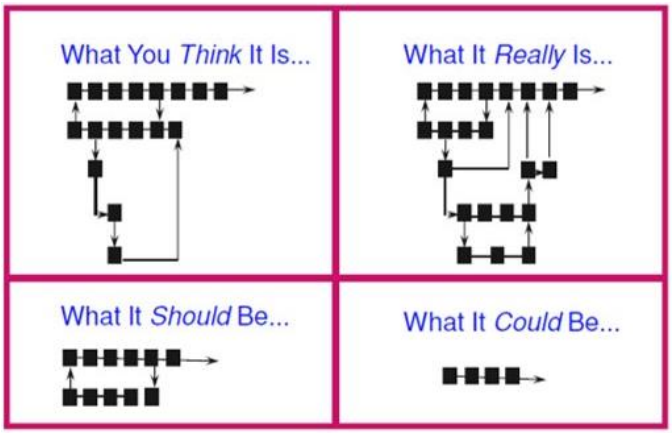

Figure 2: Process Mapping from different perspectives

How to use it?

1. Map the current state

To assist in mapping the 'current state', you may find it helpful to start by looking at the 'big picture' and by using ***SIPOC*** where the process is mapped out at a very high level, between 6 and 9 process step, to determine who does what, with what and for whom.

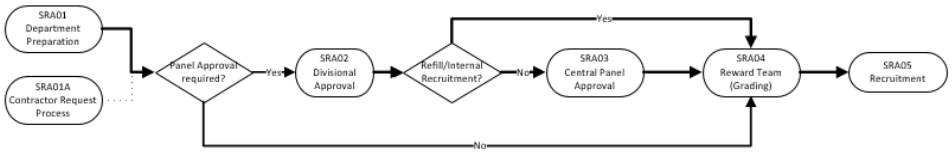

Figure 3: High level process map

Building on the ***SIPOC***, **process mapping** can be used to scope an activity to understand the end-to-end process flow and to ascertain what steps impact others and what the impact of changing one step in the process might have on the other interdependencies.

From a team perspective 'current state' process mapping helps us to step back from what we are 'doing' and really look at what we do. This is difficult to do when normally we are involved in the 'doing'.

2. Map the future state

Starting with the current state map a variety of tools can be used to analyse the map to look for improvements, these include the ***Voice of the Customer***, Critical to Quality and ***8 wastes***.

The ultimate purpose of **process mapping** is to design the 'future state' and what it *should* be like in order to meet customer requirements. However, there will be any number of constraints and interdependencies that need to be taken into consideration when co-creating what the process *could* be like.

3. The mapping process

Whether you are mapping the current or future state, for optimal **process mapping**, construct your **process map** with those who have hands-on experience of the process and with other key stakeholders. Workshops can be a useful way of doing this.

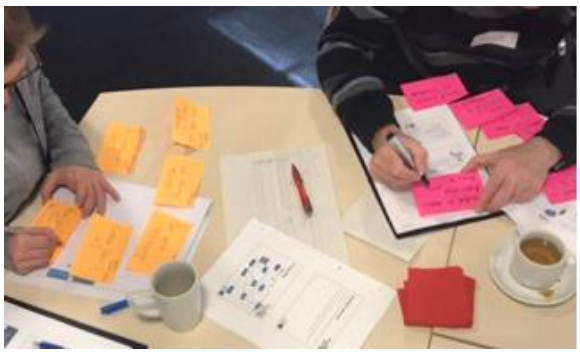

Figure 4: Process mapping workshop

- Show WHAT is being done and not HOW. Try not to exceed ten process steps in one process. If it goes into too much detail then it is a procedure (rather than a process).
- Constructing a 'swim lane' process map (a row for each team/role) can be particularly helpful in visualising interactions between departments and helping them to see how they fit into the 'bigger picture'.

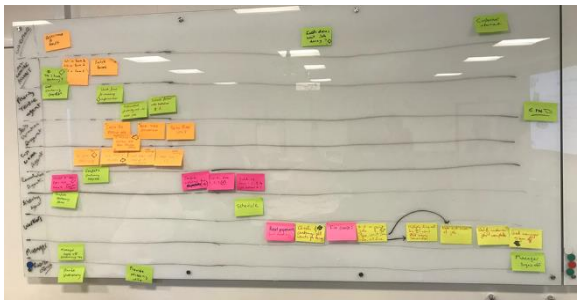

Figure 5: Process mapping exercise

- Capturing the outputs in visio (or other mapping tool) then enables the processes to be reviewed by everyone involved and updated to ensure they are correct for your particular purpose.

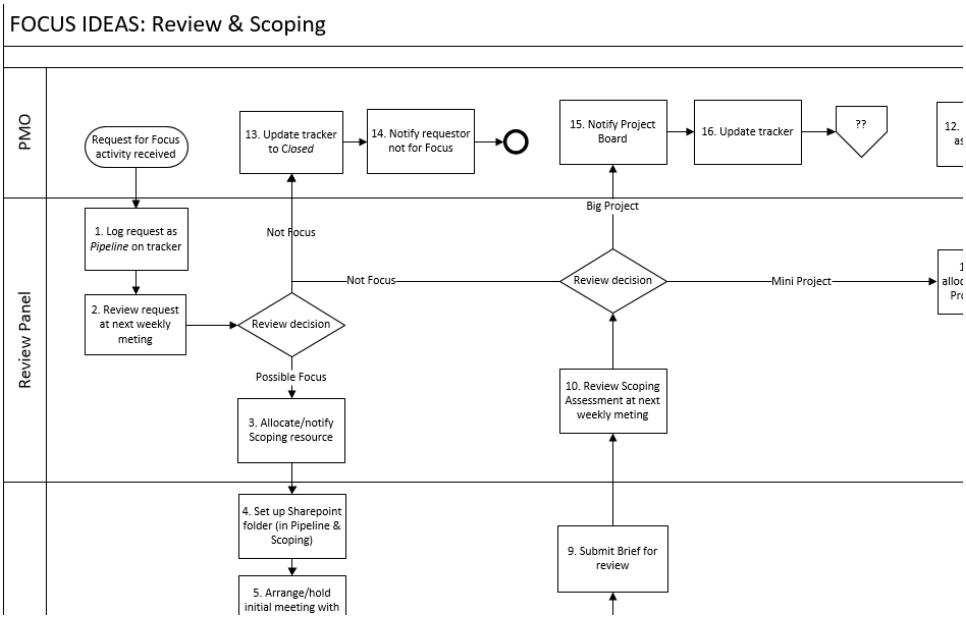

Figure 6: An example of a process map

Shared experience of what works well can help us in mapping out the 'future state' of what a process *could* be as, between us, we can look at how we can achieve consistency and agree upon how and what to standardise as ***Standard Work***. This is particularly important when University departments have been doing similar things in very different ways.

You may find it helpful to take the issues identified when mapping the 'current state' and use the ***Creative problem solving (CPS)*** process to help identify potential solutions.

Using the ***Plan-Do-Check-Act (PDCA)*** cycle, you can implement small-scale solutions by trialling changes in your process and checking to see if you can verify that you've improved the process

before rolling out more widely. This is an iterative process which is at the heart of the continuous improvement process.

Also useful

It can be useful to use other **Focus continuous improvement tools** when to help in mapping out the current state:

- Don't forget to use ***SIPOC*** to determine the high level process, who does what, with what and for whom
- Capture the ***Voice of the Customer (VOC)*** to understand the real customer experience throughout a process and to discover, through their own words, the value they get from the process
- Use ***Go See***, where feasible, to have the best indication of what really happens as opposed to what we think should happen

Additional resources

Bicheno J (2012). The Service Systems Toolbox. PICSIE Books. ISBN 978-0-9568307-0-8

'If you can't describe what you are doing as a process, you don't know what you are doing.'

WE Deming, Continuous Improvement pioneer