Quantitative Improvement Cycle

# Steps

| Purpose | Example Technique | Timing (min) | When |
| --- | --- | --- | --- |
| Gather Data | Sailboat | 15 | Sustainability Planning |
| Pick a Purpose | Cluster & dot-vote | 4 | Sustainability Planning |
| Root causes & context | Fishbone | 15 | Sustainability Planning |
| Generate Solutions | Silent generate; 15% solutions | 6 | Sustainability Planning |
| Refine & Pick Improvements | 1-3-All | 15 | Sustainability Planning |
| Define Measures | Decider protocol | 10 | Sustainability Planning |
| Implement | - | (part of daily work) |  |
| Analyze results | - | 4/day + 5 at end | Daily |
| Demo | - | 15 | Sustainability Demo |

Facilitator Tips

A few sections are less obvious. Here are some insights to try to incorporate.

| Purpose | Considerations |
| --- | --- |
| Gather Data | At first you will find lots of small problems, a new one at each cycle. Take one on at a time and change it.  Later you will start finding purposes that take several cycles to understand and incorporate. At that point, you might drop the Gather Data and Pick a Purpose sections for several cycles in a row. |
| Pick a Purpose | The first few cycles, pick *problems* to solve / *blockers*.  After that, try to also pick lucky *successes* to make systematic. |
| Root causes & context | If you are continuing a prior purpose, still do this section to see if you have changed the context. It might take less time, but it is still worth doing. |
| Generate Solutions |  |
| Refine & Pick Improvements | Depending on the exercises chosen, this and the Generate Solutions step might combine in various ways.  Pick one central theme / concept, and then create stories for each part of that.  Remember to distinguish experiments and improvements! |
| Define Measures | Pick one measure of implementation (did you do the thing you planned to try?) and one measure of impact (what effects did it have on the situation?). |
| Implement |  |
| Analyze results |  |
| Demo | This is the most important part of the process. Celebrate! It provides the pull that makes everything else work. It also keeps you concrete. |

There are also several alternate techniques you can use for each section. Each will give you different results - each exercise makes a different kind of interactions become obvious. Here are some alternatives:

| Purpose | Alternate exercise options |
| --- | --- |
| Gather Data | Timeline, pile of stickies, emotion inventory, emotion box, appreciative interviews, w3 part 1 (what), wicked questions |
| Pick a Purpose | (might be part of prior step), 1-2-4-all, decider protocol, cluster and dot vote, agreement & certainty matrix |
| Root causes & context | Drawing together, w3 part 2 (so what) |
| Generate Solutions | Improv prototyping, min specs, w3 part 3 (now what), 25/10 consulting, Troika consulting |
| Refine & Pick Improvements | as per Pick a Purpose |