WORKSHEET + WORKED EXAMPLE

Improve the Process With Evidence

A Define-Measure-Analyze-Improve-Control plan for an existing process.

25 minutes | Six Sigma · DMAIC starter

Use it in three moves

1. Define the problem and boundary with the people doing the work. Establish a baseline with a consistent measure.

2. Analyze possible causes using evidence. Test an improvement on a bounded part of the process before extending it.

3. Agree how to sustain what helped: ownership, a useful check, and a response if the process drifts.

Define · Bound the problem

Name the customer requirement, defect or gap, start/end, owner, and impact. Avoid naming the solution as the problem.

Measure · Establish a trustworthy baseline

Define start/stop timestamps, sample period, missing data, and how measurement will be checked.

Analyze · Test possible causes

Use process observation, patterns, and evidence. A fishbone is a hypothesis map, not proof of causation.

Improve the Process With Evidence

YOUR WORKING NOTES / CONTINUED

Improve · Try a bounded change

Choose a supported cause, a small change, owner, quality checks, and comparison period.

Control · Keep it workable

Document the agreed method, owner, review signal, and response when performance drifts.

Know when you need specialist support

Use qualified help for measurement-system studies, capability claims, statistical control charts, or high-consequence decisions.

A question for me

How confident are we in the measurement we are using to judge this work?

See one way through

FICTIONAL WORKED EXAMPLE / NOT THE ANSWER TO YOUR SITUATION

Define · Bound the problem

From complete access request to working access. Some requests take more than the agreed two working days.

Measure · Establish a trustworthy baseline

Sample all requests for four weeks. Confirm timestamps with two coordinators; separate incomplete requests and record why data is missing.

Analyze · Test possible causes

Compare waits by approval route and shift. Check whether delayed requests actually waited for permissions rather than assuming staff were slow.

Improve · Try a bounded change

Trial a backup approver on late shift for two weeks. Keep authorization rules and monitor errors as well as time.

Control · Keep it workable

Publish the backup route. Service owner reviews weekly time and error patterns and investigates a sustained change.

Know when you need specialist support

We will not claim a sigma level from this small sample. An analyst will help if formal capability or statistical inference is needed.

The thinking behind it

Variation often comes from the process people must work within. Investigate that process before turning a number into a judgment about someone.

DMAIC means Define, Measure, Analyze, Improve, and Control and is widely used in Six Sigma process improvement. This original planning guide covers the sequence and measurement questions; it is not statistical training, certification, or a substitute for qualified analysis.

ASQ · DMAIC

Read You Have a Culture Problem by Nic Payne