



Approaching Process Improvement

What This Paper is About

This paper describes at a high level how JBD Consulting International approaches process improvement. It also differentiates between incremental improvements to an existing process, and processes that need to be significantly overhauled. Processes that fall into the latter case are legacy processes that have not evolved with business and technical imperatives, with consequent diminished capabilities.

Two related papers that we have published are:

1. [Assessments in a Nutshell](#), which discusses when to use a process action team, and when a different approach should be employed.
2. [Measuring and Assuring Value](#), which is an overview of an integral element of any process improvement endeavor.

Foundation

We approach process improvement using a proven Six Sigma technique that is called DMAIC. It is shorthand for Define-Measure-Analyze-Improve-Control. It's data driven, and provides a structured approach that can be applied to any process improvement initiative that has a goal of *incremental improvement*.

For initiatives that require an overhaul of an existing process (or even the design and development of a new one), we use the DMAIC sibling called DMEDI (Define-Measure-Explore-Develop-Implement.)

Note: we could have opted for the Six Sigma's DMADV approach. This is the *Design for Six Sigma* sequence that is comprised of Define-Measure-Analyze-Design-Verify steps. We prefer DMEDI because it's more streamlined in our opinion, and it provides enough structure to produce repeatable results.

Once the process is upgraded or established using this approach the DMAIC sequence takes over for subsequent improvements as the process shakes out in real life, and improvement opportunities become apparent.

Each will be covered in more detail below. However, before getting to DMAIC and DMEDI, a quick overview of how we view processes is in order. When we are evaluating an existing process or laying out a new one we use a format that provides a workflow, starting with entry criteria, tasks, validation steps, and exit criteria. This is called ETVX. It is similar to the PDCA (Plan-Do-Check-Act) process structure that has been around for decades. The key difference is ETVX is simplified and allows a quick view of a process and how it flows. PDCA is based on statistical process controls, and while that fits perfectly with the DMAIC approach, it is overkill when you want to analyze a process (or design one).



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Foundation (continued)

When evaluating or designing a new process there are other factors that we consider:

1. How well does the existing process align to policies? If there are no existing policies, that gap needs to be remedied because the absence of policies means that the process was designed in a vacuum (or for new processes, there is no set of rules that define the purpose and scope of the process.
2. What are the business drivers for the process? This traces the process back to business requirements. Indeed, the business operations or imperatives that the process is supposed to be supporting need to be completely understood because if the process does not add value or support the value chain in some manner, its existence needs to be questioned.
3. Are service level targets applicable? The answer will define any service levels that will support business requirements and/or promote an efficient workflow.
4. Are existing governance and management objectives adequate? This is a question to support evaluation an existing process. It is also used to determine which governance or management objectives need to be applied to the process.
5. What metrics are being collected, and why? An existing process may be bogged down by collecting metrics that cannot be acted upon, driving up the cost of the process, or metrics that are relevant, but not being collected. The latter represents a missed opportunity to effectively and correctly monitor process performance to determine if it is performing as intended.

DMAIC & DMEDI Similarities

The following compares the similarities between the two approaches. To recap, DMAIC is used for incremental improvements and DMEDI is used when you are refactoring an existing process or developing a new one.

Define

1. Describe the driver or trigger for the process improvement, process refactoring or process development initiative.
2. Determine the scope and dependencies between or among other processes and boundaries.
3. Define the expected outcome.



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DMAIC & DMEDI Similarities (continued)

Measure

For incremental improvement or redesigned processes you need to measure the existing process' performance and compare it to the performance target per the expected outcome in the Define step.

New processes are normally measured based on the current situation and the expected outcome. In most cases attaining a 90% target attainment is an acceptable goal.

Sources of measurements include existing statistical process control charts (X-Bar R), analysis of incidents or missed service level targets, indicators of unacceptable risks, etc.

DMAIC & DMEDI Differences

The following compares the differences between DMAIC and DMEDI:

Analyze vs. Explore

Analyze in the DMAIC approach examines data collected in the Measure step. The focus is on variation, root cause analysis when the goal is eliminating specific incident types, efficiency and cost metrics.

Explore in the DMEDI sequence is to examine possible design approaches and produce an outline of a design. We always start with a deliverable called *design notes* that outlines policies (existing or required), required governance and management objectives, service level targets, and metrics. The next step is to lay out the process into workflows or the sub processes in a system map. The system map is the blueprint for the process itself.

Improve vs. Develop

In a nutshell, DMAIC is driven by existing data and DMEDI is driven by business requirements and critical customer requirements. Specifically:

DMAIC's Improve step the to-be target is identified during the previous steps.

DMEDI's goal is not to improve an existing process, it is to refactor it, or to develop a new process.



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DMAIC & DMEDI Differences (continued)

Control vs. Implement

Control in the DMAIC sequence is designed to fine tune the changes made to an existing process to bring about incremental improvements.

Implement in DMEDI is much larger in scope since you are introducing a new process or a significantly altered old one to the point that it appears new.

While organizational change management may be needed for Control, it will almost certainly be required when you are at the Implement stage in DMEDI.

Next Steps

If you found this paper via a Google search or word of mouth and want to know more please don't hesitate to [contact us](#). If, on the other hand, you want to use the content in this paper as the basis for improving processes using your own resources we would appreciate hearing from you to let us know if this paper was helpful.

We can also work with your organization to develop policies, system maps and other artifacts mentioned in this paper. For a small fee we can provide templates for those tools, as well as provide an example set of Design Notes (mentioned earlier in this document.)