



## TenStep Supplemental Paper

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### **Use Benchmarking to Improve Your Organization's Performance**

Every organization should strive to become better. As you get "better," you deliver your work faster, cheaper and with a higher level of quality. As you get "better," your customers are more satisfied. Organizations that get "better" are providing more value to the business. Organizations that do not strive to always become better will ultimately end up losing ground.

A whopping majority of organizations want to improve. The problem organizations face is how to show that they are improving. If an organization wants to show that they are providing more value to the business, they must understand where they are today and where they are at some point in the future. If they can measure these two points in some way, they can look at the difference to see whether they are doing better or worse.

#### **It all starts with metrics**

All of this ultimately boils down to metrics. If you want to show that you are performing more efficiently and effectively, you have to be able to provide quantitative numbers. If your CIO asks how well you are delivering projects, you can't provide comparisons of how many complimentary emails you have received over the past three months. This type of information is anecdotal and does not provide the hard facts that people need to make decisions.

When you have made the decision to collect organization-wide metrics, you must first look at the products and services you are providing and define a set of metrics that will give some indication of how you are performing. These metrics are going to come from one of two ways. One is to collect metrics on an organization-wide basis. For instance, you can easily determine how you are managing finances by collecting information about your budgets and your actual expenditures on an organization-wide basis.

The second way to collect organizational metrics is to consolidate consistent metrics from lower level groups. For instance, if every project reported how they performed against their initial budgets and timelines, you could consolidate the numbers and come up with qualitative information on your performance on an organization-wide basis. If all projects reported a common set of metrics on an ongoing basis, then you can determine whether or not the organization is improving over time.

#### **Metrics must become more sophisticated to provide more value**

Once you get past the simple metrics, you can develop more sophisticated common metrics. (Although they are more sophisticated, they are hopefully still easy for the project team to collect and report.) These metrics might be used to compare how certain types of projects are delivering their work versus others. For instance, you may be able to gather simple demographics (characteristics) on each project. If you have enough projects reporting, you can start to compare how successful Finance Division projects are versus other business units. You could also determine how successful web-based development projects are versus client-server development projects. If you collected information on the



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relative size of the projects, you might be able to tell how effective the organization was delivering small projects versus large projects.

### **Benchmarking allows you to compare against other companies**

As your company becomes more sophisticated at utilizing metrics, you might realize that collecting internal data is valuable, but can only take you so far. You don't really know how efficient and effective your project delivery is, for instance, unless you can compare how you deliver projects against other companies. You may find, for instance, that after implementing a common project management process, your average project budgets are reduced by 20%. However, this does not tell you that you are efficient. It only tells you that you are more efficient than you were previously. If you compared yourself against outside companies, for instance, you may find that it still takes you twice as long, and twice the cost, to deliver projects of similar size and complexity. This would be very important information to know.

Benchmarking studies (one-time) and benchmarking programs (longer-term) are a way to compare yourself against others. Benchmarking requires that you gather a set of predefined metrics that describe the result of very well-defined processes. The resulting metrics are also captured from other companies, using the same set of processes and definitions so that you can compare your organization against others. If you determine that others are doing significantly better than you, you can talk to them to see what they are doing differently from you. This information can be evaluated to determine if there are similar changes that can be applied to your organization to achieve similar results.

### **Five aspects of a benchmarking program**

A more detailed benchmarking program is more difficult to set up, but can also provide the most value to the organization. Let's look at an example of a benchmarking program that will focus on how organizations are delivering projects. In general, there are five areas you need to define.

**Company demographics.** These represent characteristics of your company and allow you to compare your company against similar companies.

**Project demographics.** These are descriptive characteristics of each individual project. Demographics are needed to be able to compare similar types of projects against each other.

**Common processes.** Each company must understand a common set of project-related processes. Even if their internal processes are different, each company must be able to map how they run projects into a common set of processes for the purposes of the benchmarking effort.

**Common metrics for each process.** The common metrics should be easy (or relatively easy) to collect, and they should represent some fundamental piece of data that can be used to create the benchmarks.



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**Benchmarks.** Metrics are combined into benchmarks that allow companies to compare themselves with other companies. This is ultimately the information everyone wants to see and compare.

### **Plan your benchmarking approach before starting to collect metrics**

So, let's say you are the CIO. Your CEO comes to you and asks how productive your IT staff is. You reply that you think your staff is productive and your internal metrics all show improvement. However, your CEO has an idea - why don't you benchmark your staff against similar companies to see how you stack up?

So, you now have a new objective on your plate. Where do you start? First, you need to do some preparation. You need to frame out what you want to accomplish through benchmarking and the type of benchmarking program you want to set up.

### **Determine what you want to accomplish**

You cannot just say you want to benchmark IT. The IT organization covers a wide variety of disciplines. You can benchmark your network, Help Desk, development area, telecommunications, etc. You need to determine the scope of the benchmarking effort. However, if you ask someone to define the scope, the first thing he/she is going to ask is "what are you trying to accomplish?" So, really the place to start is with defining your goals. Goals are high level statements that describe what you hope to achieve. The goal of benchmarking is not to gather the metrics and perform the benchmarking study. Benchmarking is only a means to an end. Benchmarking provides information that you can use to improve. Your goal might be to become more efficient in your development process, or to increase your telecommunications capability to support the business. Once you have some goal statements, you can start to narrow down the benchmarking initiative.

### **Determine benchmarking model**

Once you have defined the overall goals, you need to determine the type of benchmarking you want to do. One early decision is whether you will develop and run the benchmarking effort yourself or utilize an outside company. Both ways can work successfully. If you use an outside company, they typically have pre-existing processes, metrics and benchmarks that can be utilized entirely or as a starting point for customization. If you run the program yourself, you may have to develop all of the benchmarking content yourself.

Another area to consider is whether you are looking for a one-time study or whether the benchmarking will be ongoing. Sometimes benchmarking is only meant to take a snapshot of where you are versus other companies. These are one-time benchmarking efforts. Other times, you may want to benchmark on an ongoing basis, with metrics captured monthly or quarterly. This is more work of course, but it does allow you to make improvements and compare yourself to the benchmarking group over time.

### **Determine who you want to compare yourself with**



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Another important consideration is to determine who you want to compare yourself to. If you are a multi-billion dollar company, you don't want to compare networking capability with a collection of million dollar companies. In fact, you may turn out to be the best, but that information does not help you if you are comparing yourself to companies that are not similar to you (although they do not necessarily have to be in your industry).

### **You have enough to start working on the details**

At this point, you have defined your overall goals, the benchmarking model and the types of companies you would like to participate. The direction you take now will depend a lot on the model. If you utilize an outside company, for instance, you may have enough information to allow them to start to run the process. Hopefully, the outside company will have a detailed technical model that you can use as the basis of the benchmarking study. The outside company can also start to contact target companies to solicit their interest in participating. Remember that the benchmarking program means nothing if you can't get other companies involved.

### **Creating the detailed model**

Let's look at the information needed for the detailed benchmarking model. If you work backward, you can see that the business benefit to benchmarking comes from improving your processes. You improve your processes by first seeing who is doing better than you and then understanding how they are doing similar work. You determine who is doing better than you by comparing yourself to other companies using a common and agreed upon set of benchmarks. The benchmarks are determined using a set of underlying and agreed upon metrics. The metrics are established to provide an indication of how your processes are working. Since all companies use different processes, you must first determine a common set of processes that each company can understand.

Taking the benchmarking logic chain the other way, you must map your own processes into a common detailed process model, then collect metrics for each process and report the metrics to a common collection point. The metrics are combined into numeric benchmarks that allow companies to compare themselves and be ranked. You then look at companies that rank higher than you to determine what they are doing differently and how you might change to become better.

### **Setting up a good benchmarking program**

A good benchmarking program will have the following characteristics.

- **A scalable approach for companies of all sizes, including medium and small organizations.** Most of the information needs to be normalized in such a way that it allows comparisons between companies and between projects.
- **Standardized process definitions and metrics to be used across all industries and companies.** You want to make sure that all participating companies can map their internal processes into the benchmarking processes so that valid comparisons can be made.



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- **Clear demographics for comparing apples with apples.** Demographics are descriptive characteristics that allow you to understand more about the companies, organizations and projects that you are comparing yourself to. Company demographics, for instance, allow you to compare yourself against companies in similar industries or similar sizes. Project demographics allow you to compare yourself against similar projects. For instance, you might want to compare how you specifically deliver web applications versus other companies in your same industry. Or, you might want to compare how you deliver traditional client-server projects against other companies that are using Agile techniques.
- **Emphasis on simplicity, practicality and the cost of data collection.** The harder it is to collect the data, the less likely the information will be accurate. The benchmarking program should look for metrics that can most easily be collected and will provide the most value.

It might be hard to visualize how the benchmarks are set up, so let's run through a simple example of how companies deliver business applications.

**First, define the common processes.** Let's say that you define the first two steps in a project life cycle as "Planning" and "Analysis" For each step, you would need to describe information such as a description of what happens in this process, the main customer(s), the person(s) who executes the process, the events that must happen before this process can occur, key inputs to the process and where they come from, key outputs of the process and where they go, and how you know when the process is complete.

This type of information will allow each company to map the steps in their internal methodology against the standard processes in the benchmarking study. It is also likely that each of the processes will be broken down into further subprocesses. If so, each subprocess will also need a common definition.

**Next, define the common metrics.** Once you have a set of commonly understood processes and subprocesses, you can define a set of metrics that represent various aspects of the processes. The metrics should be easy (or relatively easy) to collect and they should represent some fundamental piece of data that can be used to create the benchmarks. The metrics themselves cannot be compared from project to project or company to company. Only when the metrics are utilized in the benchmarks (next) can the comparisons be made. Examples of metrics for the Planning and Analysis processes might be:

- Estimated effort to complete
- Actual effort to complete
- Estimated duration to complete
- Actual duration to complete
- Estimated cost to complete
- Actual cost to complete



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- Number of defects

For each metric, you must also provide a common definition, including how the metric is calculated, how frequently it is collected, when it is collected and some categorization data that allows you to collect a well-rounded set of metrics.

**Lastly, create the benchmarks.** The metrics are combined into benchmarks that allow companies to compare themselves with other companies. Examples of benchmarks include:

- **Project Duration Variance** (actual duration / estimated duration)
- **Project Effort Variance** (actual effort / estimated effort)
- **Project Cost Variance** (actual cost / estimated cost)

As you have seen before, you also need to define the benchmarks, including how the benchmark is calculated based on the metrics, benchmark classification (to create a balanced set of benchmarks such as financial, client satisfaction, quality, etc.) and how to interpret the resulting benchmark numbers.

In the example above, for instance, you might say that each company should strive to have a Project Duration Variance of 1.0, which would mean that the actual duration of each project was exactly as estimated. If your company ranked 15 out of 20 companies in the benchmarking study, it would mean that 14 companies deliver against expectations better than you. It doesn't mean they deliver cheaper or faster than you. Those would be different benchmarks. This benchmark only tells you how you deliver against your estimates.

### **See how to gain the value from your benchmarking program**

Let's say now that all of this prior work has been completed. You have reported your metrics and you have received back the results of the benchmarking study. Unfortunately, and not surprisingly, you do not rank number one.

Some companies strive to be number one. Wal-Mart, for instance, strives to be super efficient in its internal processes, which they hope will help translate into the lowest prices on the store shelves. Most companies, however, have more modest, but still worthy goals, such as being in the top 25% in terms of similar sized companies.

Now that you have the results of the benchmarking study, you need to decide what you want to do. The benchmarking results are only of incremental value if you do not act on them in some way.

**First, validate your understanding of the results.** You can't start to make improvements in areas if you are not sure what the benchmarking report is telling you. If you are ranked low in certain benchmarking categories, make sure that you understand how the benchmark was calculated and mentally visualize how the benchmark relates to your organization. Remember that the benchmarks are based on a common set of processes that may not all easily translate to your company.



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**Determine which areas to work on.** Once you have read and understood the benchmarking report, you need to determine what areas, if any, should be focused on for future improvement. This is an important area to work on with the management team. There may be dozens of benchmarks reported, and you cannot focus on trying to improve everything at once. The areas you choose will be based on the ones that are the most important to your organization, the ones where you have the most opportunities for improvement, and the ones where you have the easiest ability to improve.

As an example, let's say that one benchmark shows that you are ranked 5<sup>th</sup> out of 25 companies. Unless your organization is one that feels it absolutely has to be number one, this is probably not an area you need to work on. It is not worth the effort to move marginally up in an area where you are already doing a good job. Let's take another benchmark where you rank 20<sup>th</sup> out of 25 companies. After reviewing the benchmark, however, you determine that this particular benchmark is not important to your strategy and goals, and so this is not one that you focus on either.

A third benchmark, however, is very important to your organization, and you currently rank 15<sup>th</sup> out of 25 companies. This one goes down on your list as an area for improvement.

**Talk to industry leaders regarding best practices.** You have now identified a handful of areas where you think you need to improve to be more effective and efficient. Now you need to get more information and ideas for how to improve. One place to go is to talk with the companies that are considered best in class for those benchmarks. You don't need to talk to the companies that are one or two places in front of you. Talk to the companies that are at the top of the benchmark. For instance, if you rank low in your ability to deliver projects close to your estimates, then talk to the top three companies in that area. The company that performed the benchmarking study should be able to get you connected with the appropriate people at the top companies. Talk to them about their processes. You may discover ideas that you can bring to your organization as well.

**Set your targets.** At this point, you have identified improvement opportunities as well as best practices from the top companies in each area. Your management team needs to determine where they want to be in each area in the future. As was mentioned in an earlier example, most organizations don't have the need to be world-class in every internal process. However, for some companies, there are areas where that is the challenge. Most companies, however, will set goals to be in the top 50%, top 25% or top 10.

Your targets are also influenced by where you are today. If you are ranked last in an important category, your target may be to get into the top 50%. If you are in the top 50% of an important category, you might set a target to move to the top 25%.

**Create and execute an improvement plan.** If you do everything up to this point, but you do not create and execute an improvement plan, then everything else will have been wasted. You now have a short list of improvement areas, best practices from leaders and



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targets for where you want to be at some point in the future. Now you need to create a plan to get there.

You may be able to put some aspects of your improvement plan into place immediately. Other components of the plan may need to wait. If your organization is large, it may take multiple years to get you where you need to be. However, everything starts with a vision and a plan to get you there.

**Benchmark again at a later date.** You will never know whether your plan succeeded unless you perform follow-up benchmarking in the future. Remember that you may have improved, but the other companies in the study will be improving as well. If possible, a similar benchmark against similar companies would be best. If you participate in a completely new study, you may not be able to compare apples to apples when determining whether your improvement plan was successful or not.

### Summary

Some people advocate benchmarking without understanding what it is, how a program works, and how to ultimately gain the value from the study. If you create a program from scratch, you have a lot of work to do. If you participate in a benchmarking study that has already been defined by another company or a vendor, you still need to know how the study was put together.

Now, however, you know the key to successful benchmarking. The bottom line is that you must determine what you will do with the benchmarking information once you receive it. If you do not intend to put an improvement plan into place, then you might as well not participate in a benchmarking program to begin with. Improvement is the ultimate goal. Benchmarking is a tool that can provide relevant information on where you need these improvements.