Benchmarking

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D2.01 INTRODUCTION

Benchmarking can be defined as a documented, measured, quantified, and actionable comparison. The comparison must be part of a formal process, however, rather than an informal one. Merriam Webster's Collegiate Dictionary defines benchmark as (1) a point of reference from which measurements may be made; (2) something that serves as a standard by which others may be measured or judged; (3) a standardized problem or test that serves as a basis for evaluation or comparison. According to the American Productivity & Quality Center, benchmarking is defined as, "The process of identifying, understanding, and adapting outstanding practices and processes from organizations anywhere in the world to help your organization improve its performance."

Note that the definition of benchmark includes no reference to "being the best." A benchmark does not have to be the "best in the world." For use as a benchmark, being the best may not be appropriate. It is important to realize that different levels of comparison are useful in different ways and depend greatly on specific business objectives. To determine the level by which to benchmark, it is critical to recognize whether the business must have the best (fastest, cheapest, highest quality) process in the world, or in a certain country, or even in a specific region, state, or city.

Benchmarking is also the process of continuously comparing and measuring the organization against business leaders anywhere in the world. This is done to gain knowledge and information to help the organization take action to improve its performance. In addition, this process must be systematic and it must be continuous. But benchmarking is much more than gathering intelligence about competitors, their processes, and their products. To succeed with benchmarking, companies must understand how to apply the intelligence they gather, as well as how to take action based on the intelligence, looking toward continuous improvement. In short, this means that companies cannot benchmark anything only once, but must continue to include benchmarking as an integral part of the overall management plan. And companies must always remember that the principal reason to do benchmarking is to change—a lot. Benchmarking is a voluntary, cooperative learning process in which two or more organizations agree to exchange information. You have every right to protect your trade secrets, and so do your benchmarking partners. Benchmarking, at its best, adheres to a code of conduct that benefits all parties.

Benchmarking is a managed process for rapid improvement. It does not simply happen and it isn't always easy. A company must have goals, resources, and a thorough understanding of its current performance.

Benchmarking can be done effectively by any organization, regardless of size or industry. Although it was pioneered by large organizations, primarily the Xerox Corporation, it is a technique that any company can adapt to fit its needs. Often people confuse benchmarking with best practices, but the two are quite different. Best practices is simply the best way to do a process. But benchmarking is the process of continuously comparing and measuring an organization's business process against business leaders anywhere in the world. Areas that may be measured include (1) quality, (2) cost, and (3) time.

According to the International Benchmarking Clearinghouse, there are notable misconceptions about benchmarking. Thus, it is important to understand the following:

- Benchmarking is not just metrics (i.e., number of employees per HR staff person). Metrics are important, but benchmarking is ultimately about how and why processes work.
- Benchmarking is not only competitive analysis. Breakthrough ideas may best come from outside the confines of the current organizational environment. There are always common processes, such as billing customers or hiring employees, that virtually all organizations perform regardless of their business. In addition, there are analogous processes in many different enterprises. One hospital improved its check-in practices by learning from an excellent hotel chain, and an airline achieved radical improvements in maintenance by studying Indianapolis 500 pit crews. Remember, benchmarking means adapting practices, not merely copying them.
- Benchmarking is not just site visits to other organizations. This can easily turn into "industrial tourism." A trip probably shouldn't be the first step. Much can be learned from research before making any site visits. When travel is in order, it is important to determine beforehand precisely what the company expects to learn. Being well prepared avoids wasting time.

D2.02 TYPES OF BENCHMARKING

Benchmarking comparisons can be specialized to meet the specific needs of the organization. Benchmarking types include the following:

Internal benchmarking is a comparison of two similar divisions, departments, or other functional cost units within a company. For instance, a company can compare billing processes between customers, or compare the sales division with the marketing division, or compare one store to another.

Competitive benchmarking calls for the comparison of two competing businesses in a particular process or activity.

Functional or generic benchmarking requires more creativity. It compares similar processes in sometimes completely different entities. For instance, how does the billing process for a particular manufacturer compare with the billing process for a particular utility?

It is not unheard of for a company to undertake all three types of benchmarking. Perhaps the best-known example is Southwest Airlines. The benchmark team at Southwest had a goal of reducing "time on the ground" for each plane. The team began by comparing the company's own crews (internal benchmarking) to discover which one was fastest—without sacrificing quality—in getting a plane checked out, refueled, loaded, and back in the sky. The team then compared the performance of other carriers' crews (competitive benchmarking). When these comparisons were complete, the benchmarking team took another, more imaginative look—at the pit crews for Indianapolis racecars (functional/generic benchmarking). The team asked itself questions, such as: What skills did racecar crews have, and what processes did they use that might translate into reducing the time a plane spends on the ground between flights? Findings from all three comparisons could then be incorporated into Southwest's ongoing improvement process.

D2.03 PURPOSES OF BENCHMARKING

When utilized to its potential, benchmarking provides a company's management with the information necessary to:

- Identify the need for change (above and beyond an incremental, business-as-usual level of improvement);
- Set stretch goals and give them credibility by saying: "Yes, it can be done. Others have done it";
- Accelerate the reengineering of processes and activities to achieve breakthrough improvements; and
- Stimulate creativity in problem solving and process improvement.

D2.04 THE BENCHMARKING PROCESS

[1] Getting Started

There are at least three proven ways to begin a benchmarking project:

1. Do a pilot study for a small, easy-to-manage process. A successful pilot can prove the concept and generate enthusiasm for larger-scale efforts.

2. Buy reports or help fund a group study. Many industry associations and business groups benchmark processes at several companies at once. They then share this information with participants or the public. One of the leading research groups is the American Productivity & Quality Center. The APQC is a business-oriented nonprofit source for performance improvement and decision support, with information and knowledge, networking, research, training, and advisory services. Organizations of all sizes and industries—business, government, education, and health care—partner with APQC to discover global best practices, and to grow into learning organizations.

3. Work with firms well versed in benchmarking for their clients.

Benchmarking is a process like any other. It requires specific steps, or phases, in order to be successful. The general steps of benchmarking consist of five phases: (1) selecting a process and the project, (2) planning, collecting data and documenting the process, (3) selecting benchmarking partners, (4) conducting the benchmark study, and (5) implementing improvements.

[2] Phase I: Planning

Any benchmarking project begins with the selection of the process or other aspect of the business to compare. Once this is done, a plan is prepared to document the scope, key measures, objectives, time line, and resources required to perform the benchmark project. It is important to note that, as in any project, the time spent in planning may well determine the ultimate success of the project.

The selection of what to benchmark is significant. Neither hard work nor detailed planning down the road can change a wrong choice made at the start of a project. Four criteria should be considered in the selection of what to benchmark:

1. Critical success factors of the business. Some processes are critical to achieving strategic and operational goals of an organization. If it is not important to the success of the business, it is probably not important enough to benchmark.

2. Improvement of customer satisfaction. To get the most from the process changes, companies must consider what is important to their customers. This criterion also includes processes relating directly to the customer. Specifically, these processes determine judgments customers make about the entire organization.

3. High-cost processes. For example, a 10 percent improvement in a process costing $1 million per year is better than a 50 percent improvement in a process costing just $100,000 per year.

4. Processes affecting other processes. Some processes, performed poorly, cause costs in other parts of the organization. For example, a lending institution has processes in place to grant credit and loans to individuals and businesses. If these processes are performed poorly, other parts of the lending institution must utilize follow-up and collection activities. In addition, poorly performed credit activities can also result in cash losses from noncollection. So although the cost of the credit-granting process itself may be low, the total cost to the organization may potentially be quite large.

It is equally important to plan the project. This includes agreement on the scope, objectives, time line, and resources required to deliver the final product, as well as selecting the leader and team members responsible for the effort. Another important part of the planning effort is selecting the process measures to be benchmarked, such as productivity, quality, cycle time, and customer satisfaction. These measures are important because they are the metrics or benchmarks indicating how well the process is being performed. The final step in planning is determining the data to be

collected. In some cases the data may unavailable and must be developed. It is an important component to determine during this phase, as it will have an impact not only on the time line, but also on the scope of work required to complete the project.

[3] Phase II: Documentation and Data Collection

Once the plan is in place, the process to be benchmarked must be understood, documented, analyzed, and measured. Internal data and measures of performance must be collected. It is nearly impossible to benchmark without this kind of information. The following questions must be answered during this phase:

- How is the process currently accomplished in the company?
- What resources (e.g., time, money, materials) are consumed by the process?
- How are the results of the process measured?
- Who are the internal and external customers of the process? What are their requirements?
- What data should be collected for comparison?

Phase II requires analyzing process flows and measures through flowcharting, and the input of process owners and performers is vital. Flowcharting defines the boundaries of a process, determining where it starts, where it stops, and everything in between. This exercise typically tracks inputs to the process, and outputs, the results of the process. It calls attention to problems in the process, and is a pictorial representation of the steps involved in any process. Flowcharts should be used to:

- Analyze a system or work flow;
- Show the ideal system;
- Determine the gap between actual and ideal systems;
- Understand a process;
- Eliminate non-value-added steps in the process;
- Eliminate duplication in the process;
- Eliminate delays in the process;
- Reduce paperwork;
- Simplify the process; or
- Identify points in the process where data should be collected.

When constructing a flowchart, it is essential to define the boundaries of the process to focus clearly on one particular process, eliminating other interweaving processes. Sticking to one process at a time makes the entire benchmarking project more manageable.

Process measurements should be quantifiable; otherwise it is impossible to compare your processes to those of another company. Examples of possible process measurements include productivity, accuracy, speed, cost/profitability, and service. Once documentation and analysis of key processes are in place, organizations are often surprised to discover significant areas for improvement. And it is not unusual for an organization to first make improvements in its own process before attempting to learn and benchmark from others, in order to avoid embarrassment.

The result of Phase II is a documented and measured process that can be benchmarked.

[4] Phase III: Selecting Benchmark Partners

The objective of this phase is to select benchmark partner(s) and to solicit their participation. In doing so, companies plan to scrutinize three areas:

1. Which companies perform this process better?
2. Which company is best at performing this process?
3. Who should be contacted to initiate the benchmarking process?

The key to each of these areas is research. Sources include key word searches, business libraries, government documents, business and trade press, technical journals, public financial statements and 10-Ks, industry association materials, conference proceedings, data bases, clipping services, and information networks. Contacting and working with potential partners may involve (but are not limited to) questionnaires, interviews, and site visits. And remember benchmarking is a quid pro quo process. Companies must be ready and willing to offer information to any benchmarking partners.

[5] Phase IV: Conducting the Study

Once the process to be benchmarked is documented and the benchmark partner selected, the study can be completed. There are a number of further steps, however, in order to conduct a successful benchmark study. These include developing a survey or interview guide, conducting site visits, documenting and analyzing the benchmark partner's process, identifying gaps and root cause, isolating process enablers, and documenting study results. Each step must be sufficiently detailed so the knowledge and information gained is actionable and can be used to improve the process benchmarked.

Of these steps, one of the most crucial is the development of the survey or interview guide. This is important because there may not be an opportunity to visit again or to be in continual contact with the benchmark partner to gather additional information. The guide helps ensure the right information is collected and the proper questions are asked in the beginning. In developing the guide, two kinds of questions can be generated:

1. *Open-ended questions*. With this kind of question any response is possible. The objective is to solicit discussion and understanding.

2. *Closed-ended questions*. This kind of question yields ranked or scaled responses. Often they are multiple choice. The purpose of closed-ended questions is to provide ranking and priorities, so the significance of the process can be understood.

To assist in achieving the most effective site visit and/or interview possible, consider the guidelines listed at the end of this chapter.

Documenting the benchmark partner's process is conducted in the same manner as documenting an internal process. The mechanism for identifying gaps between a partner's process and one's own and discovering root causes includes comparison of the process performance measures identified in the planning stage and documented in the data gathering phase. Gaps should be quantified and explored to identify all possible causes. Once all of these have been considered, they can be broken down to reach the primary cause of the gap.

Isolating the process enablers is one of the most important parts of Phase IV. Enablers help explain why the benchmark partner can perform the process in a superior way and could include systems, software, methods, procedures, policies, documents, unique skills, training, or techniques.

During the documentation and analysis process, the following questions should be answered:

- Do the two companies use the same performance measures? How do the two processes compare? What is the magnitude of the performance gap?
- What is the root cause of the performance gap? Why is the other company's process better?
- Will the other company's process continue to improve? How much? What is the company's performance goal for the process?
- How well does the other company's process perform over time? In different locations?
- What business practices contribute to better performance? What inhibits better performance internally?
- Should the process be redesigned based on what is learned? What would the redesign require?
- Could the best-practice process be improved over time if adopted and, if so, how?

The goal during this phase should be to determine three performance levels for the process:

1. Baseline — minimum performance for the process;
2. Entitlement — results to be realized with current resources; and
3. Benchmark — goal within a specified time.

These levels continue to change. As a process improves, the current benchmark level becomes the new entitlement level, while a new benchmark is developed, spurring further improvements.

As a result of this phase, a documented study is developed identifying potential changes to the existing process, identifying factors that could inhibit adaptation of the process, prioritizing changes, developing goals for improvement, and providing actionable recommendations for improvements and changes.

[6] Phase V: Implementing Improvements

This may be the most difficult of the benchmarking phases. This is due, in large part, to the reality that making real process improvements requires management leadership, process owner or performer buy-in, and a commitment of time, money, and effort. In many ways, the process begins again at this stage. A new plan is needed, including the appropriate delineation of

objectives and expected results; roles and responsibilities; time frame and deadlines; and progressive milestones. More than ever before, the organization must have a firm commitment to move forward and must examine these considerations:

- How to gain support for improvements and change;
- Actions needed to implement improvements;
- Resources required;
- How to evaluate the improvements for effectiveness;
- How to improve the process further.

A sample benchmarking approach is shown in Figure D2-1 .

Figure D2-1.

Sample Approach to Benchmarking

1. **Determine What to Benchmark**. Key Steps in the process:

- Perform analysis of processes with the highest impact on results
- Prioritize processes for benchmarking effort
- Organize the project
- Select the team
- Obtain buy-in from process owner
- Conduct background research—What is already available on best practices

2. **Understand Your Own Processes**. Key Steps in the process:

- Process map to really understand existing processes
- Determine and collect Key Performance Indicators (KPI's) that measure process success (e.g., Quality, Cost, Time)

3. **Obtain, Understand & Analyze Global Best Practices**. Key Steps in the process:

- Select Benchmarking Partners
- Recruit Benchmarking Partners
- Agree on ground rules for information sharing
- Design and develop questionnaires (if applicable)
- Collect field data and information from partners(s) (e.g., through surveys or interviews)

4. **Analyze Current and Future Performance Gaps**. Key Steps in the process:

- Analyze comparative performances and processes
- Compare and contrast best practices with your own processes and practices
- Develop conclusions on changes needed and communicate results

5. **Adapt and Incorporate Best Practices**. Key steps in the process:

- Obtain buy-in for changes needed for implementation
- Implement change through process owners
- Monitor results and improvements

6. **Recalibrate and Improve.**

[7] Results and Outputs

Benchmarking projects generally provide the following outputs:

- Measures that compare performance for the benchmarked process or metric (see examples in Figure D2-2 and Figure D2-3).
- A description of the organization's gap in performance to those companies participating in the benchmark process.
- An identification of whose best practices produced these results observed during the study.

Figure D2-2.

Sample Measurements for Corporate Real Estate

- Annual Occupancy Expenses as a Percent of Revenue
- Annual Occupancy Expenses as a Percent of Total Expenses
- Annual Occupancy Cost PSF by Space Type
- Annual Occupancy Cost per Employee Housed and/or Process Utilized
- Net Operating Income PSF
- Return on Equity or Contribution to Return on Capital Employed
- Overhead as a Percent of Revenue
- Asset Revenue to Expense Ratio
- Comparative Occupancy Cost by Category
- Savings Generated Including Entitlements
- Capital Made Available for Redeployment

Other Drivers

- Complexity of Transaction/Occupancy Agreement
- Applications & Use of Systems & Technology

Figure D2-3.

Sample Measurement with Strategic Implications

- Total Size of the Portfolio Metrics

  — Building Count & Square Feet
  — Domestic vs. International

- — Owned vs. Leased
- — Type of Space (Office/Administrative, Manufacturing, Warehouse/Distribution, R&D, Other)

- Financial Performance Metrics

  - — Occupancy Cost per Square Foot
  - — Occupancy Cost As Percentage of Total Revenue
  - — Annual Capital Expended on Real Estate

- Operational Performance Metrics

  - — Square Foot per Person (Admin. Only)
  - — Manufacturing Metric
  - — R&D Metric

- Other Performance Metrics

  - — Telecommuting Metric
  - — Alternative Office/Space Use Strategies

The key to success in benchmarking is simply to charge ahead, but do to so with both eyes open. The potential benefits are undeniable, but to realize the benefits it is imperative to understand the process. The following section on benchmarking protocol, interview guidelines, and do's and don'ts will provide quick reviews.

D2.05 BENCHMARKING PROTOCOL

The responsibilities of benchmarkers include the following:

- Know and abide by the benchmarking code of conduct.
- Have a basic knowledge of benchmarking and follow a benchmarking process.
- Prior to initiating conduct with potential benchmarking partners, should have determined what to benchmark, identified key performance variables to study, recognized superior performing companies, and completed a rigorous self-assessment.
- Develop a questionnaire and interview guide and share these documents in advance if requested.
- Possess the authority to share and be willing to share information with benchmarking partners.
- Work through a specified host and mutually agreed upon scheduling and meeting arrangements.

When the benchmarking process proceeds to a face-to-face site visit, the following behaviors are encouraged:

- Provide meeting agenda in advance.

- Be professional, honest, courteous, and prompt.
- Introduce all attendees and explain why they are present.
- Adhere to the agenda.
- Use language that is universal, not one's own jargon.
- Be sure that neither party is sharing proprietary information unless both parties have obtained prior approval from the proper authority.
- Share information about your own process, and, if asked, consider sharing study results.
- Offer to facilitate a future reciprocal visit.
- Conclude meeting and visits on schedule.
- Thank your benchmarking partner for sharing their process.

The following guidelines apply to both partners in a benchmarking encounter with competitors or potential competitors:

- In benchmarking with competitors, establish specific ground rules up front (e.g., "We don't want to talk about things that will give either of us a competitive advantage, but rather we want to see where we both can mutually improve or gain benefit").
- Benchmarkers should check with legal counsel if any information gathering procedure is in doubt (i.e., before contacting a fierce competitor). If uncomfortable, do not proceed, or sign a security/nondisclosure agreement. Negotiate a specific nondisclosure agreement that will satisfy attorneys from both companies.
- Do not ask competitors for sensitive data or cause the benchmarking partner to feel they must provide such data to keep the process going.
- Use an ethical third party to assemble and "blind" competitive data, with inputs from legal counsel in direct competitor sharing. (Note: When cost is closely linked to price, sharing cost data can be considered to be price sharing.)
- Any information obtained from a benchmarking partner should be treated as internal, privileged communications. If "confidential" or proprietary material is to be exchanged, then a specific agreement should be executed to indicate the content of the material that needs to be protected, the duration of the period of protection, the conditions for permitting access to the material, and the specific handling requirements that are necessary for the material.

[1] Interview Guidelines

Before contact, prepare the following:

- An opening statement
- A summary of the purpose
- An explanation of the basis for selecting the target company

During the initial contact:

- Exploit the interviewee's sense of pride in his or her organization
- Request a site visit
- Give any instructions to help the interviewee prepare for the visit

In preparing the visit plan, perform the following:

- Prioritize objectives
- Review current data about the target company
- Prepare nonleading and pertinent questions (and explanations for why they are asked)
- Prepare answers to reciprocal questions and predetermine what information can be shared
- Plan to take appropriate people to the site
- Obtain approval to release proprietary data
- Prepare a company presentation package to present to the host.

During and after the visit:

- Be honest
- Clearly state goals for the visit
- Ask appropriate and thorough questions
- Report back to appropriate people
- Compile and analyze data

The purpose of site visits is to document and analyze the benchmark partner's process, to identify gaps and root cause, and to isolate the process enablers. Documenting the benchmark partner's process is conducted in the same way as documenting your own process.

[2] Benchmarking Do's and Don'ts

Although no two projects are exactly the same, there are some guidelines that remain constant when conducting benchmarking.

Do:

- Locate public documents through secondary research
- Perform reverse engineering
- Conduct market research and customer satisfaction surveys
- Gather information at trade shows
- Solicit other companies directly to share information
- Utilize your company's employees knowledge and experience

Don't:

- Trespass to collect information
- Bribe
- "Bug" or eavesdrop
- Learn (by whatever means) about a competitor's pricing consideration
- Participate in insider trading
- Refuse to do business with a study non-participant

Avoid:

- Participating in a technical meeting without identifying the company you represent
- Recruiting employees to obtain information about their previous employer
- Noting a company affiliation when subscribing to competitor's journals or attending conferences
- Releasing names or information without prior permission
- Failing to honor the quid pro quo nature of benchmarking
- Industrial tourism
- Refusing to follow the agreed-upon agenda or protocol during a site visit

D2.06 ESSENTIAL BENCHMARKING DEFINITIONS

Process—a series of interrelated transactions that convert inputs into results, or outputs. Processes consume resources and require standards and documentation for repeatable performance. Processes respond to control systems that direct the quality, rate, and cost of performance.

Best practice—leadership, management, or operational methods or approaches that lead to exceptional performance. Best practices is a relative term and usually indicates innovative or interesting business practices that have been identified as contributing to improved performance at leading companies.

Competitive analysis methods—analyzing the gap between organizational performance measures and performance measures of competing organizations.

Critical success factors—those characteristics, conditions, or variables having a direct influence on the satisfaction of customers and, therefore, on the success of an organization.

Enablers—those processes, practices, or methods that make possible the "best practice" performance. While performance benchmarks indicate the magnitude of excellence achieved in execution, enablers identify the reasons behind the successful process implementation: the system, method, document, training, or techniques facilitating the success of the process.

Entitlement—the best to be achieved using current resources to eliminate waste and improve cycle time.