

DoD ESI White Paper

Software Acquisition Benchmarking Guide

Practical guidance to bolster the software
benchmarking process in DoD

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Benchmarking is a topic widely addressed in the business world, and applies to many different activities. Most commonly, it is part of quality initiatives, such as Total Quality Management – TQM, Six Sigma Practices, etc. Benchmarking enables the comparison of an individual or business's practices, processes, and results to others, so one can validate that your methods reflect best practices, or upgrade your practices and processes to successful industry best practices. When applying benchmarking to acquisitions, it provides for establishing a set of data extracted from similar recently completed acquisitions, so that the acquirer knows the range of outcome they can expect for price, terms, conditions, and other factors. Benchmarking yields an educated purchaser.

This document will focus on Software Price Benchmarking and will address the process, tasks and resources required to perform Software Price Benchmarking in the current DoD environment. It will also discuss how acquisition professionals must rely on their individual efforts to perform benchmarking as no automated tools or processes exist.

Drawing from industry best practices on Benchmarking, and orienting these practices towards software price benchmarking, the following process is proposed:

- 1) Identify Tasks, Goals, Actions, and Resources.**
- 2) Determine Data Availability and Limitations.**
- 3) Gather, Organize, and Analyze Data.**
- 4) Document Benchmarking Results.**

The detailed approach to the above 4 phases are outlined on the following pages.

1) Identify Tasks, Goals, Actions, and Resources

Step	Description of Task	Goal	Action	Resources/Tools
1A	Adapt the Benchmark Table Template to fit your transaction.	Develop a benchmark tool for your transaction.	<p>Review the Benchmark Table Template and adapt the criteria to fit your transaction. This includes: a list of Requirements/Fit, Pricing Information, and Terms and Conditions to be used in assessing S/W capabilities and comparing alternate products and approaches.</p> <p>Review your criteria with the end-user community, PMO, Technical Resources, and Software Licensing SMEs.</p> <p>Conduct Market Research and determine Commercial Standard Practices of Publisher/Vendor.</p> <p>Finalize your criteria by incorporating user community input and Market Research. For example, if Self-Audit is not applicable, remove from the table.</p>	<p>1st Draft Benchmark Table</p> <p>Survey (used to gather feedback on criteria)</p> <p>2nd Draft of Benchmark Table</p>
1B	Define Process	Develop the Plan of Action and Milestones (POAM).	Outline of Initial Plan of all Steps, Resources, and Schedule Milestones.	Project Plan and Schedule.

2) Determine Data Availability and Limitations

Step	Description of Task	Goal	Action	Resources/Tools
2A	Conduct Research to Determine Transaction Data Availability.	<p>Audit of Data Availability: Determine what data is available and how it can be captured.</p> <ul style="list-style-type: none"> • A best practice is to use 2-4 similar transactions as this will offer a better insight into Vendor practices. • Use of more than 4 similar transactions is considered excellent for benchmarking purposes. 	<p>Search Government and Commercial Industries for Sources of Transaction Data</p> <p>Gather easiest to access data. Determine if there will be enough data to perform valid benchmarking.</p> <ul style="list-style-type: none"> • Sources include: KOs (in your command, other commands in service and other services), ESI SPMs, Gartner, Commercial records, etc. 	Reference draft version of Benchmark Table.
2B	Adjust Goals and Benchmark Table to Reflect Available Data.	Finalize the Benchmark Table criteria to include the available data.	<p>Establish the fit of the Data to the Best Case Output.</p> <p>Increase, leave unchanged, or decrease the complexity of the Benchmark Table to fit data availability.</p>	Final Benchmark Table.

3) Gather and Analyze Data

Step	Description of Task	Goal	Action	Resources/Tools
3A	Compile and Input all Pertinent Transaction Data.	<p>Record of all of similar transactions.</p> <p>Identify all Data Elements from Benchmark Table.</p>	<p>Develop a list of all Transactions in the Data Set.</p> <p>Ensure each Transaction record includes all or almost all Data elements.</p> <p>Research transactions with incomplete data and add missing data to record.</p> <ul style="list-style-type: none"> Utilize End Users, Technical Team, PMO, and S/W Licensing SME as needed and as available. 	<p>List of all Transactions used in Benchmarking.</p> <p>Conduct manual research and data entry of missing Transaction data.</p> <p>Completed Benchmark Table (Data Complete).</p>
3B	Establish Scoring System	<p>Score each Element of Each Transaction.</p> <p>Establish an Overall Transaction Score.</p> <p>Identify Positive Transaction Elements.</p> <p>Identify Risky or not Positive Transaction Elements.</p>	<p>On an item by item basis, assign a score for that transactions result on that item compared to the "Best Case" for that element.</p> <p>Using a weighting of the individual data element scores (high weight to more important items), establish an overall transaction score.</p> <p>Utilize Commercial Standard Practice in establishing Scoring method.</p> <p>Note especially positive elements of the transaction.</p> <p>Note any potentially risky or negative elements of the transaction. For example, items that do not fully meet the requirements.</p>	<p>Line Item Scores for each element on the Benchmark Table.</p> <p>Composite Score on Benchmark Table for the Transaction.</p> <p>Develop/add to List of Good Practices for this Publisher or Program.</p> <p>Develop/add to List of Practices to be avoided with this Publisher or Program.</p>

4) Document Benchmarking Results

Step	Description of Task	Goal	Action	Resources/Tools
4A	Summary Report Benchmarking Results.	Rank the overall scores from best to worst.	Stack Rank all Transactions by Overall Score	
4B	Detailed Information on Scoring Process, Data Elements Selected, and Additional Information.	Identification of all Data Elements Benchmarked, weighting assigned and reason for weighting, and Scoring by Element and reason for Score.	Include detailed benchmark table and notes so Summary data is supported by details.	
4C	Develop Goals for Upcoming Negotiations or Establish Scoring of a Pending Transaction.	Adjust Negotiation Goals to Obtain the Best Possible (and Realistic) Contract, using Benchmark Data to negotiate from a position of knowledge.	<p>Use the Benchmark Table to establish Negotiating Position including desired results and fallback positions.</p> <p>Use the List of Good Practices to obtain beneficial Ts & Cs that the Vendor has previously granted.</p> <p>Use the List of Practices to be avoided to ensure the contract does not include these items.</p>	

Benchmark Process

1 Identify Tasks, Goals, Actions, and Resources

2 Determine Data Availability and Limitations

3 Gather and Analyze Data

4 Document Benchmarking Results

Integration of Benchmark Process into S/W Acquisition Process

Pending S/W Acquisition with Known Requirements

Perform Benchmarking to Establish a "Best Case" Outcome

Issue RFP

Receive Proposals

Analyze Proposals Using Benchmark Data

Establish Negotiating Position

Negotiate

Award



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