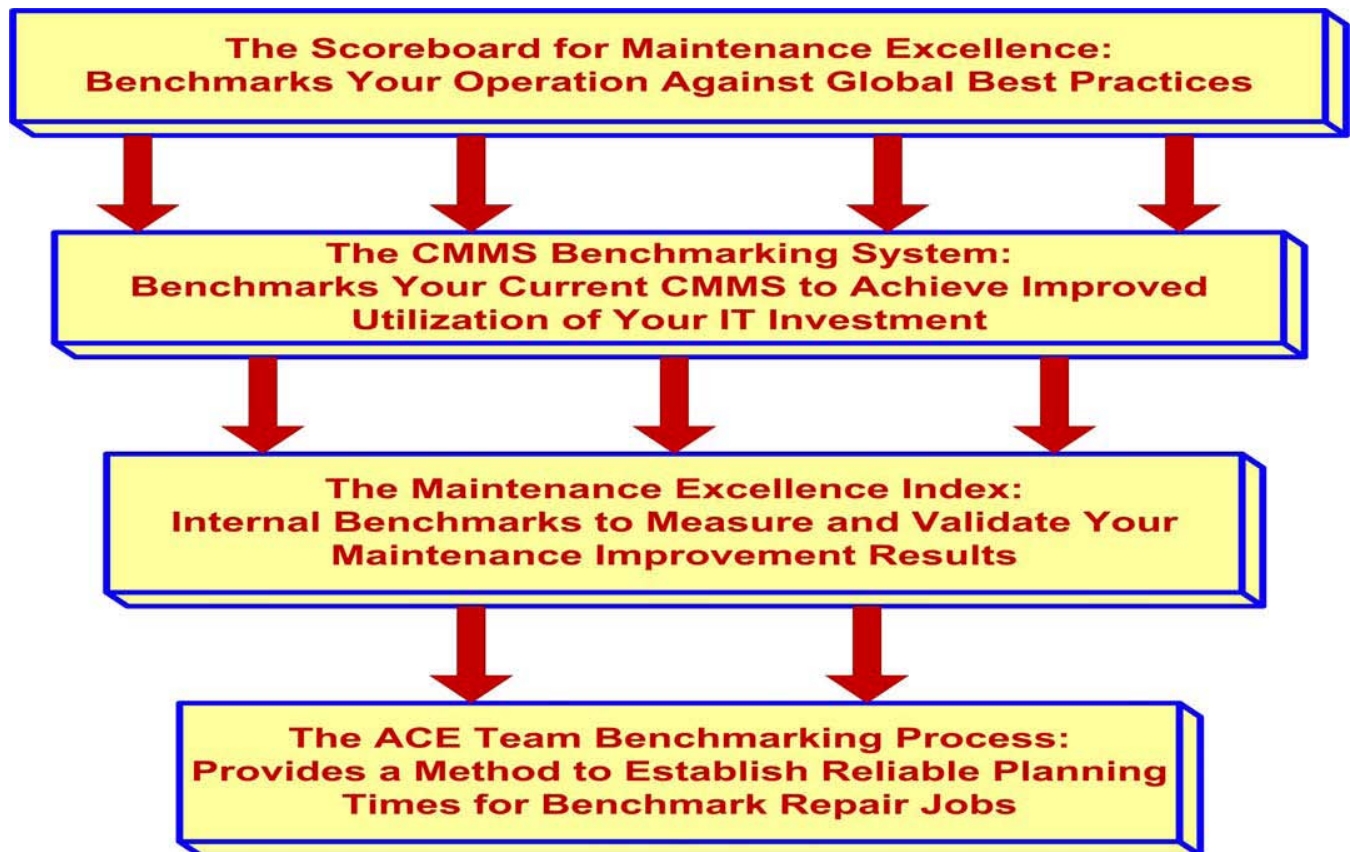




Profit-Centered Benchmarking

by Ralph W. "Pete" Peters

The objective of The Maintenance Excellence Institute is to help you maximize the value of your current maintenance operation. It is to support improving either profit or the customer service in your organization and very often both. It is about benchmarking maintenance from four key levels that can lead you toward business process improvement for "the business of maintenance" and can guide you to be [Profit-Centered and Customer-Centered \(PCCM\)](#).



Four Levels of Maintenance Benchmarking

Tools to Use Now! It is for maintenance leaders at all levels and in both large and small operations. Another objective is to give you proven tools for benchmarking that you can use right now! Our desire is for the free material from our www.PRIDE-in-Maintenance.com site to help the small maintenance operations of from 5 or 10 crafts in say a small manufacturing plant or a small facilities complex. Small shops face the same technical and maintenance management challenges as the 100 to 200 total craft employee operations.

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Maintenance Around the World: The science and basic technologies of physical asset maintenance is common all across the world. Only the scope and location provides the difference for the profession of maintenance. In other words, our material has universal application to all sized operations and most all types of maintenance operation. Applying the tools and strategies presented will help you, the Maintenance Leader from both the public and private sectors to benchmark your current operation against today's best practices We will approach it from a profit-centered and customer-centered strategy for improvement.

Benchmarking: There are numerous definitions of benchmarking but in the simplest form, it is about "making improvements by learning from others". Benchmarking also is the process of identifying, understanding, and adapting today's outstanding maintenance practices to help your organization improve its performance. We do not subscribe to the current buzzword style of benchmarking. This being where one does research on companies with superior performance, designs pre-visit questionnaires and makes numerous plant visits, to analyze/analyze in order to find where your own gaps might be in terms of your current performance.

For maintenance operations, there already exists a wealth of knowledge as to currently accepted maintenance best practices. There are numerous books and countless seminars on the major best practice areas such planning and scheduling, preventive and predictive maintenance, maintenance engineering, reliability centered maintenance, maintenance storeroom and MRO materials management and CMMS applications. For the most part, I really feel that the true **Maintenance Leader** knows what they are.

Avoid Industrial Tourism Benchmarking: Maintenance benchmarking does not take weeks and weeks of analysis paralysis with a travel agent for industrial tourism for visits and more data from other organizations or "benchmark partners". They may not be even close to yours when comparing "benchmark statistics" to begin with. Put the analysis time where it will do the most good; into doing, trying new things and implementation. Maintenance benchmarking recognizes that no organization whether public or private is exceptional at every best practice that we all read about. Benchmarking must be an ongoing process and is not a one-shot event. Implementing maintenance best practices is not a one-time "Kaizan event". It is a profit and customer-centered attitude and philosophy to ensure you have the basics firmly in place and continuously more up the scale with more advance technologies that apply.

Process Benchmarking: Benchmarking requires that you constantly search for better solutions never becoming satisfied with the status quo. When you continuously search for and implement maintenance best practices from the best firms around the world, then you will become the leader of an exceptional maintenance operation. Every process and task of your total organization can be benchmarked. Processes ranging from production, to marketing, to purchasing, to information technology management, to customer service and certainly maintenance can benefit from benchmarking. We will cover benchmarking termed as "best

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practices in benchmarking" or "process benchmarking" to help you improve the total maintenance process.

Personal Lessons Learned and Case Studies: Throughout www.PRIDE-in-Maintenance.com we share a number of personal lessons learned as well as many case study examples to illustrate key points. We can definitely “make improvement by learning from others” though sharing of ideas through professional contacts, current literature, seminars and trade shows. As I have seen in my travels around the world we can find good ideas and learn from our counterparts about the business of maintenance.

Establish the Basics: What it does take is making sure you have the basic foundation right and then having the courage to continuously improve; that is kaizen and industrial engineering. Maintenance benchmarking at the strategic or global level is about “determining where you are now” and “where you want to go” to improve your maintenance business processes. It is also internal benchmarks that get down to “your shop level” for measurable results of implementation.

You Must Think Global & Start Local. A benchmark is a point of reference for a measurement. This book will allow you to begin right now to define your own benchmark statistics and current baselines with these four very important benchmark measurement tools:

1. ***The Scoreboard for Maintenance Excellence*** for Maximizing Overall Best Practices
2. ***The CMMS Benchmarking System*** for Optimizing Your Information Technology Investment
3. ***The Reliability & Maintenance Excellence Index*** for Validating Bottom Line Results
4. ***The ACE Team Benchmarking Process*** for Developing Reliable Planning Times

Each of these benchmark tools when used will become your point of reference for measurement of mission-essential maintenance from four distinct points of reference. It must start with a personal philosophy of continuous improvement. Benchmarking must also start with a firm commitment to implement needed best practices after you have “determined where you are.”

Often our toughest competitor is our own organization that does not understand the true value of maintenance, the high cost of deferred maintenance, or the dangers of gambling with a run-to-failure strategy of continuous reactive maintenance. It is important to realize that there are two basic forms of benchmarking, internal and external, and to understand why both are essential during the journey to maintenance excellence.

Global Maintenance Best Practices Serve as External Benchmarks

There are many maintenance practices to serve as the global external benchmarks. External benchmarking is about gaining the knowledge and understanding of best practices and then

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applying them within the maintenance operation to support total operations success. Today's best maintenance practices are in areas such as:

- Preventive/predictive maintenance
- Continuous Reliability Improvement
- Reliability centered maintenance
- Maintenance parts/materials control
- Maintenance storeroom operations
- Work order and work control
- Maintenance planning/scheduling
- Maintenance budget and cost control
- Operator-based maintenance
- Team-based continuous improvement
- Improving and measuring equipment effectiveness and reliability
- Craft skills development
- Maintenance performance measurement
- Computerized maintenance management systems

Just Do It! Effective benchmarking should start locally with a total evaluation of current maintenance practices and procedures and then lead to the development of plan of actions that lead to successful implementation. Plan of actions may be at various levels; strategic, tactical or operational levels. And there will be very, short term; DO IT Now! ones. Start with the items you have direct control over and Just Do It! As NIKE says in it's commercials. All combine to provide the road map of varying map scale for applying maintenance best practices through a long-term process of continuous improvement. Benchmarking at its best is when maintenance effectively measures its level of services and practices, and develops its own unique benchmarking criteria with high standards for maintenance excellence.

External benchmarking within maintenance allows for taking the global view of identifying best practices. Then determining how they can be adapted and applied successfully within your own unique maintenance operation. External benchmarking provides for developing broad-based comparisons with other maintenance operations in terms of best practices, standard operating procedures, and industry wide practice. *The Scoreboard for Maintenance Excellence* is today's most comprehensive guide for external benchmarking. It covers 27 best practice categories and 300 evaluation criteria.

We must "Think Global but Start Local" with maintenance benchmarking: Internal benchmarking starts locally within the maintenance operation at the shop floor. It focuses on measuring the successful execution of best practices such as CMMS, preventive and predictive maintenance, maintenance planning and scheduling and effective maintenance storeroom operations.

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Internal benchmarking is about developing specific internal metrics or performance indicators. It is about determining progress from an internal baseline or starting point and measuring the progress toward a performance goal specific to your type of maintenance operation. For example, an internal benchmark could be the current level of maintenance related downtime hours for a critical asset or the maintenance cost per unit of output such as cost per ton, cost per carton or cost per equivalent standard hour if a standard cost system is in place. As you will see from our articles, The Reliability & Maintenance Excellence Index will provide an important means to measure the results of our maintenance improvement process.

Define Your Baseline: Personally, I feel it is much more important to begin measuring where you are now with key performance indicators to define your current baseline, than to worry about the published performance statistics of other maintenance organizations. Industry standards can be useful, but your progress from your current baseline toward your performance goals is the most important issue.

Internal benchmarking is also about how well we are using our existing CMMS to enhance maintenance best practices. [The CMMS Benchmarking System](#) is an important internal benchmarking tool to help gain maximum value from an existing CMMS or from the implementation of a new system for computerized maintenance management. Also, [The Reliability & Maintenance Excellence Index](#) takes benchmarking down to the shop level and supports improving productivity and safety of our most important maintenance resources; the crafts people.

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