The Data Miner enables companies to explore CII’s database, uncover interesting trends, and conduct sensitivity analyses concerning projects in their portfolio. Seeing specific metrics in the Data Miner will help CII companies shape their thinking about how to execute specific projects. Over time, CII believes that this form of assessment will enable breakthroughs in project performance and business outcomes.

“Before anything else, preparation is the key to success.” – Alexander Graham Bell

The old adage, “fail to plan, plan to fail” still holds true today. The good news is that CII’s Performance Assessment System (PAS) is now a tremendous resource for preparing to execute a capital project. Through its research, CII continues to uncover new ways to improve the management of projects. As a result, the outlook for CII’s Benchmarking and Metrics program is bright. There continues to be great interest among all industry companies to understand project performance in specific contexts and in comparison with their peer and competitor companies. For example, later this year, CII will begin to investigate the development of specific, absolute metrics for power generation and transmission projects. As a non-profit, university-based research institute, CII is uniquely positioned to provide quantitative project performance information to its member companies.

To become involved in CII’s Benchmarking program, or to learn more about its development, please contact:

Stephen P. Mulva, Ph.D.
Associate Director
e-mail: smulva@mail.utexas.edu
phone: (512) 232-3013

Jiukun (Jason) Dai, Ph.D.
Research Engineer
e-mail: jiukun.dai@cii.utexas.edu
phone: (512) 232-3050

CII Benchmarking and Metrics Today: By the Numbers

The CII Benchmarking and Metrics program is a user-friendly, resource efficient, statistically credible benchmarking system. Since 1996, the program has:

- Assessed 1,988 projects worth over $128 Billion
- Trained 1,000 people as Benchmarking Associates
- Involved 138 companies submitting at least one project
- Produced over 40 Benchmarking reports and publications
- Been advised by 150 current and former committee members

Today, the program employs 8 staff members to advance project performance through benchmarking research. CII’s benchmarking staff also produces publications loaded with analyses of industry performance and trends. The benefits of benchmarking with CII are numerous and all CII Member companies can submit projects for free. The starting point is CII’s online Performance Assessment System (PAS), where real-time project performance data can be obtained.

http://www.construction-institute.org/benchmarking
“If we all worked on the assumption that what is accepted as true is really true, there would be little hope of advance.” – Orville Wright

15 years ago, CII began to collect the first projects into its database. At the time, the goals of this effort were simple: to begin to obtain a quantitative understanding of project performance. In the years since, CII has created a resource of invaluable performance information that has been used by numerous companies and CII research efforts. It has contributed to the development of many industry advances, tools, and innovations. Today, the CII project database continues to be an increasingly valuable source of performance improvement – a trend that will continue into the future. Consequently, this issue of Performance Assessment takes a look at the legacy of the CII Benchmarking and Metrics Program, what CII is currently discovering, and what opportunities lie ahead.

“I don’t work on a project unless I believe that it will dramatically improve life for a bunch of people.” – Dean Kamen

The goal of a capital project is the delivery of benefits. Regardless of the type of project, these benefits are not just financial – they directly impact the health, mobility, education, and advancement of people. The attainment of cost, schedule, and technical objectives is important, but only if these objectives add to the delivery of benefits. This is a distinction that many people either don’t understand or are structurally unable to affect.

“Revenue Weeks”

The theme for the 2011 CII Annual Conference is “Driving Predictable Business Outcomes in a Dynamic Global Market.” During the past year, CII’s Benchmarking and Metrics Staff have begun to conduct several research efforts to understand the relationship between the delivery of a capital project and its business outcome / benefit. In research related to the efforts of RT 260 (Reimbursable Contracts), CII Staff examined 116 capital projects between $25 million and $500 million (normalized to $250 million project (red) and $250 million cost reimbursable project (blue). Besides the relative positioning of the execution phases, most notable was the observed reduction in overall execution schedule. In fact, an additional 24 weeks of beneficial operation for the facility may be possible when similar projects are executed with cost reimbursable contracts.

Interface Management

Closer interaction and involvement amongst both business / sponsor personnel and project personnel may be necessary to improve the delivery of benefits from a capital project. CII Benchmarking and Metrics staff recently launched a supplemental questionnaire to 150 projects to investigate the interface between business and project personnel in an owner organization – something which has not been done to date. The hypothesis is that this interface is lacking and may result in suboptimal business and/or project performance outcomes. CII will publish the results of this research in 2012.

“You don’t concentrate on risks. You concentrate on results. No risk is too great to prevent the necessary job from getting done.” – Chuck Yeager

The state of the art in project execution will remain status quo until someone takes a risk to try a new approach, to implement CII research, or to think about the project differently. For years, CII has examined the impact that individual best practices amongst others.

“It’s not what you look at that matters, it’s what you see.” – Henry David Thoreau

CII is launching its Performance Assessment System (PAS) at the 2012 CII Annual Conference. The PAS includes a “first-of-its-kind” online data mining system, known as the CII Data Miner, shown below.