
BENCHMARKING – LESSON'S LEARNED

IF YOU'RE NOT KEEPING SCORE, YOU'RE JUST
PRACTICING



What is Benchmarking & Metrics?

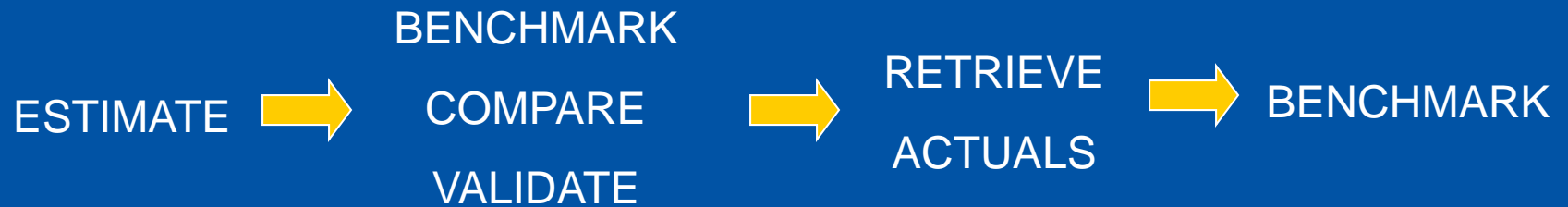
- The CII Benchmarking & Metrics program provides the means for members and subscribers to compare their capital and maintenance projects with the “best in class.”
- 6 Sections of Qualitative & Quantitative ?’s
- 111 Pages of information to be populated
- Approx. 80 hours of effort per project

General	Performance	Engineering Productivity	Construction Productivity	Practices	Closeout
100% General Info & Characteristics	100% Cost	33% Concrete	33% 17% Concrete	CII Best Practices - Front End Planning 100% : Proj. Definition Rating Index 33% - Project Risk Assessment 100% - Team Building 100% - Alignment 100% - Design for Maintainability 100% - Constructability 100% - Materials Management 100% - Other.....	100% Achieving Facility Capacity
100% Engineering Standards and Deliverables	100% Schedule	100% Structural Steel	100% 83% Structural Steel		86% Work-hours and Accidents
100% Project Scope	100% Changes	86% Electrical	100% 83% Electrical		100% Project Impacts
100% Project Functions & Contract Types	86% Rework	100% Piping	86% 67% Piping		86% Workforce Conditions
100% % Union Workforce		86% Instrumentation	86% 67% Instrumentation		
		86% Equipment	86% 67% Equipment	COAA- Workface Planning?	
			100% 83% Insulation		
			50% 33% Modules Installation		
			100% 83% Scaffolding		
			100% 83% Const. Wk-hrs		

Why do Benchmarking?

Short Term

- *Alberta Report 2008*
- *Set the stage for measurement within the company*

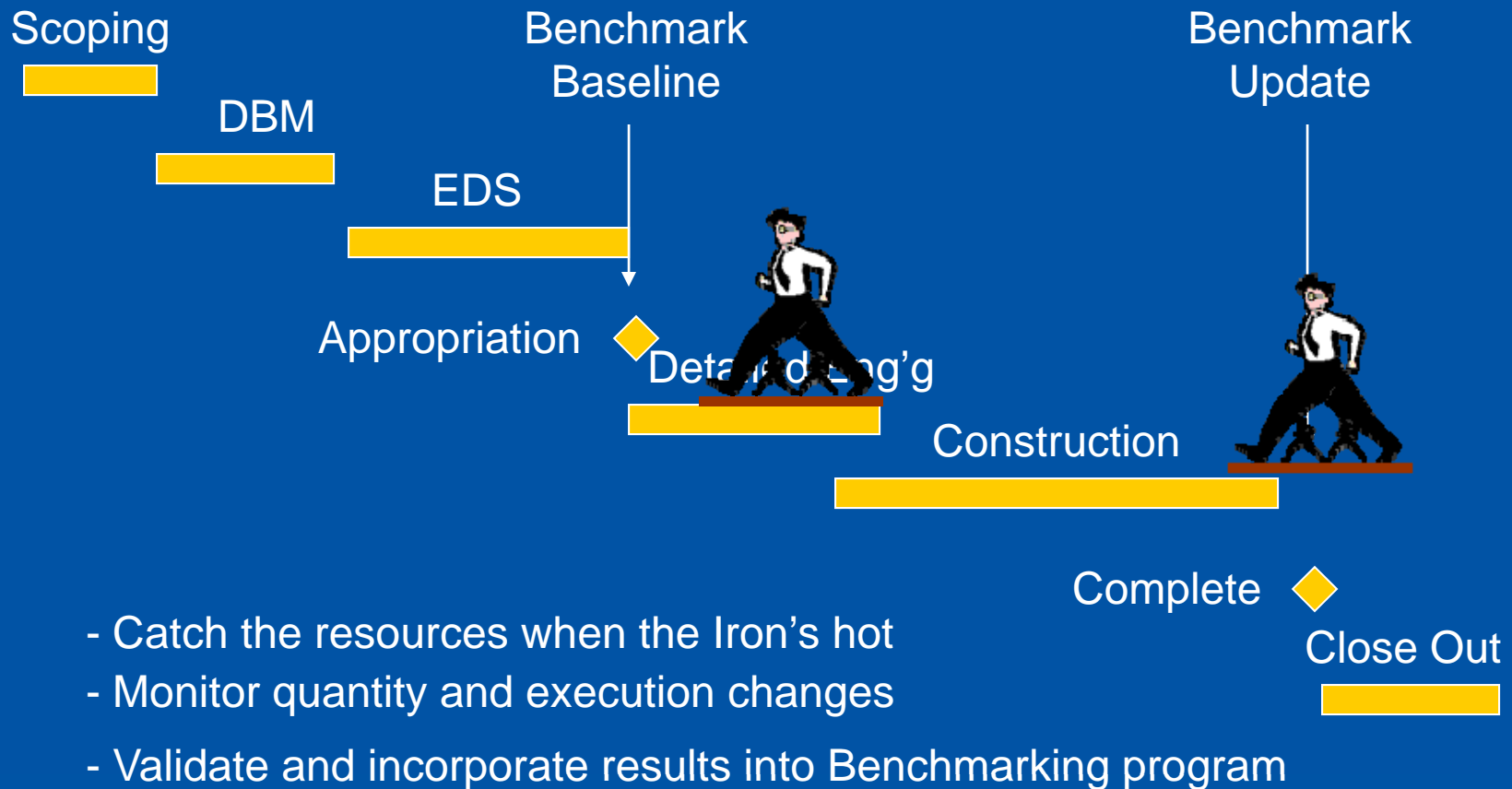


Why do Benchmarking?

Long Term

- *Improve Project Execution with QUANTIFIABLE learning's*
 - *Is Modularization beneficial, and is there a trade-off?*
 - *Did projects with Workface Planning produce lower cost metrics?*
 - *Compare results against database mean*

Project Lifecycle



OPTIONAL TEXT

Who fills out the Questionnaire?



Microsoft Excel
Worksheet

How to make data “Collection” effective?

- Divide and conquer
- Schedule Interviews
- Issue appropriate section of the questionnaire ahead of meeting
- Be prepared – Have questionnaire in hand
- Definitions can be misinterpreted,
- Lay out expectations

THE FIRST “GUT” SELECTION IS PROBABLY THE MOST CORRECT!

How to make data “Collection” effective?

Industrial PDRI Business Elements	Definition Level at Authorization (1) Complete <----->Poor (5)
Reliability Philosophy (A1)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Products (B1)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Market Strategy (B2)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Project Strategy (B3)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Capacities (B5)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Technology (C1)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Processes (C2)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Project Objectives Statement (D1)	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Project Design Criteria (D2)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> Not Applicable <input type="radio"/> Unknown
Site Characteristics Available vs. Required (D3)	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable <input type="radio"/> Unknown

**I DON'T CARE WHY YOU CHOSE THAT EXECUTION STRATEGY,...
JUST SELECT THE APPROPRIATE ANSWER!**

Challenges

- Accurate Trended Quantities
- Historical data captured with the appropriate level of detail
- Timely Completion (after the project is completed)
- Resource Availability / Focus



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QUESTIONS?

