PROJECT REWORK REDUCTION TOOL – PRRT 2004 NOVA Award Nomination 8

The innovation:
PRRT™ is an interactive Project Management software tool for enhanced leadership, accountability, and implementation of proven Industry Best Practices for Industrial EPC Projects.

PRRT can engage all project participants and stakeholders. Implemented as early as possible in a project's timeline, PRRT promises to substantially the likelihood of project success by mitigating wasteful and frustrating project rework, but above all, costly Field Rework. CII suggests 'the prize' from an elimination of field rework, and hence unplanned project cost growth, can be over 10% of overall project cost alone. It'll be far greater across an entire project having engineering and procurement. PRRT comprises two discrete, but interrelated, areas:

1. The Project Rework Reduction Index – PRRI: Centered around an interactive Rework Cause Classification Diagram, PRRT uses relevant phase review questionnaires for quick and comprehensive 'project health checks' to detect/ predict, evaluate and vividly illustrate deficiencies in a project. There are weightings of questions and responses of the principal rework causes within the 5 broad sections. The resulting PRRI Tile Chart and PRRI Dashboard screens are ideal for team reviews, directing the project team to focus to issues that matter most. The graphics are readily copied amongst MS applications and so are ideal for project reports. The increased awareness to rework causes promotes team appreciation as to where proven efficiencies can be derived. Also they'll better strive to "do things right the first time." If anything, the discipline to perform regular reviews and the alignment that occurs as responses are provided are as invaluable as the hi-impact graphics themselves. PRRI may also be used as a project audit tool.
2. The Definitions and Suggestions Database Area: Reviews as above are but the first important step to rework reduction. Having detected/ predicted deficiencies in a project, PRRT offers a Definitions and Suggestions Database comprising a goldmine of ideas and Industry Best Practices to mitigate the potential for rework problems. For practical analysis, PRRT identifies, defines and offers Suggestions and Best Practices in 93 subcategories, elements of the exact same 5 broad sections used in PRRI. The comprehensive compendium of bulleted suggestions, together with the embedded resource documents and templates offer concise solutions. They are derived from lessons learned by COAA team members and published sources, but principally from a significant culling from research publications of the CII (for which kind permission was granted.)

With regular project phase reviews, PRRT tracks project performance over time. There is no limit to the number of projects that can be managed and tracked, as the details of each project are saved in individual .prrt files.

Other prime features of PRRT include a library, a bookshop, and a section with links to websites of global institutions and publications that offer additional specific resources, often for free. User friendliness of the software was a principal development criterion and comprehensive user instructions are provided. Initially developed with the Oil and Gas industries in mind, PRRT begs to be extended to other industries.

Why is it innovative?
Project Controls for Cost and Schedule alone are commonplace, but a control tool to assure optimum stewardship and management of the overall project effort is sorely needed. PRRT was developed to address the simple premise that disasters in industrial project execution can be mitigated early on by honest detection, evaluation and mitigation of deficiencies in the early development and project execution plans.

CII publications, like works of other industry authors, are often very longwinded. The simple reality is that project team members have even less time to search for solutions when difficulties arise. The bulleted ideas and suggestions provide succinct solutions for the team to consider. A find feature assists searching. The extensive, and linked, resource documents are very distilled, providing practical and easy to apply delivery of Industry Best Practices that are sure to make a difference....and rapidly. The form of electronic delivery in the Suggestions area, and a 24/7 availability, makes PRRT a valuable training tool for new and veteran project personnel alike. Such a vast array of construction expertise has never before been made available in this categorized and innovative form (replacing countless training manuals and books that just simply gather dust on office shelves).

What it changed or replaced
PRRT sets out to complement traditional and common project controls, and much more! It focuses on those 'softer' management issues that often go unnoticed or ignored until it's too late. Most project controls tools are reactive, but PRRT can predict and mitigate rework issues BEFORE they impact project schedule and the 'bottom line.'

Where and when it originated, has it been used, and is expected to be used in future
PRRT originates from an initiative of the Rework Reduction Subcommittee of the COAA, Construction Owners Association of Alberta (www.coaa.ab.ca.) COAA is already renowned in Canada for its highly successful initiatives in Industrial Safety and Workforce Development. Ken East, PRRT team leader and unpaid volunteer, conceived this innovation and, realizing the benefits it can offer projects globally, is singularly promoting the innovation for greater visibility and use; also to develop it to its maximum potential.

In its current version 2.0, PRRT has been made available for free to COAA members. Most of the 470 attendees of the COAA May 2003 Conference took a copy of the CD Rom. PRRT is also available for free web download, with an astonishing 1200 downloads recorded to date. We are aware Suncor Energy and Colt Engineering are applying PRRT very successfully on their major projects. SNC Lavalin and Petro-Canada, to name but two other major corporations, are in the throes of engaging PRRT to assist with their EPC projects. Feedback from Suncor Energy and Colt has been extremely positive and gratifying.

PRRT was developed entirely by unpaid volunteers and with very limited sponsorship for third party cots. There are more and significant features that require to be added to attain a truly professional tool. Showcasing by CIF can attract an interested partner to optimize and commercialize this simple but valuable tool. It is hoped to develop PRRT into a world-class product by enhancing the software's already well-developed features. Also, it's envisaged that with commercialization, PRRT may be readily crafted to suit the specific natures and needs of other fields of engineering construction, such as civil, power, commercial, and offshore.

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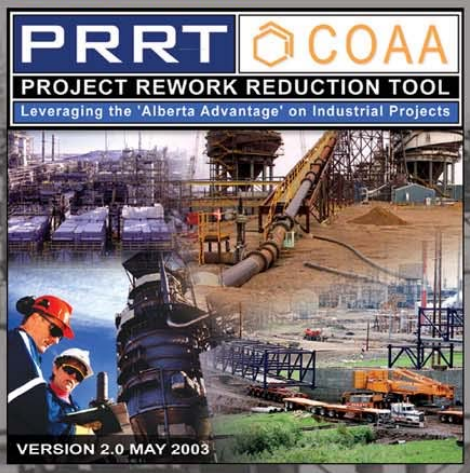
PRRT™ COAA

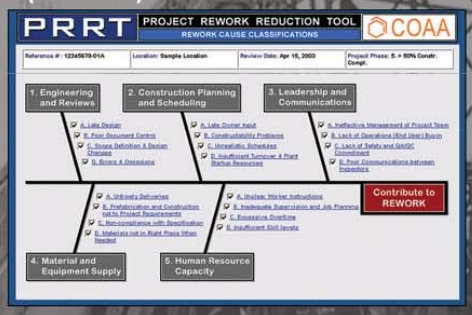
PROJECT REWORK REDUCTION TOOL

Leveraging the 'Alberta Advantage' on Industrial Projects

CD ROM - Front Cover

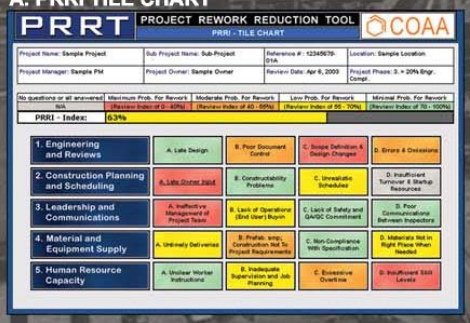


*** REWORK CAUSE CLASSIFICATIONS**
(Interactive)

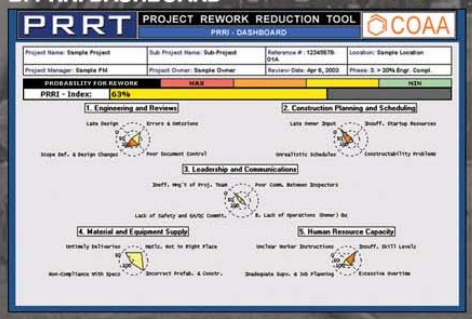


*** PROJECT EVALUATION**

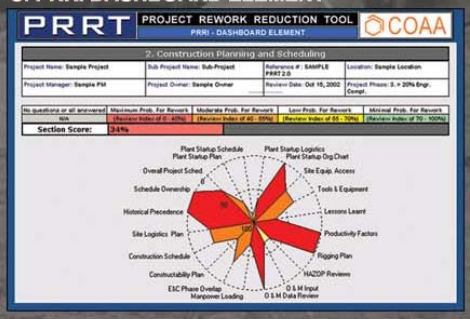
A. PRRI TILE CHART

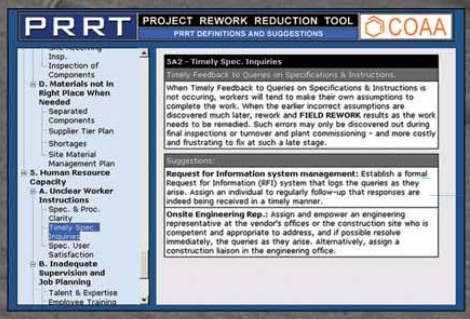


B. PRRI DASHBOARD



C. PRRI DASHBOARD ELEMENT



*** DEFINITION & SUGGESTION SCREENS**

A. SUGGESTIONS DATABASE