Information Technology and Software

Enhanced Project Management Tool

An organizational technology for complex systems

Many organizations face complex, hierarchical program and management structures, each with its own budget, requirements, milestones, and goals. This invention is a system for managing a project that includes multiple tasks and a plurality of workers. Input information includes characterizations based upon a human model, a team model, and a product model. Periodic reports, such as monthly report, a task plan report, a schedule report, a budget report, and a risk management report, are generated and made available for display or further analysis or collection into a customized report template. An extensible database allows searching for information based upon context and content. Seven different types of project risks are addressed, including non-availability of required skill mix of workers. The system can be configured to exchange data and results with corresponding portions of similar project analyses, and to provide user-specific access to specified information.

BENEFITS

- Comprehensive
- Web-enabled
- Automated
- Useful to send information from program operations to decision-making authorities
- Reduced labor-intensive data gathering and reporting
- Helpful to program managers responding proactively to changes

technology solution

THE TECHNOLOGY

A searchable skill set module lists a name of each worker employed by the company and/or employed by one or more companies that contract services for the company, and a list of skills possessed by each such worker. When the system receives a description of a skill set that is needed for a project, the skill set module is queried. The name and relevant skill(s) possessed by each worker that has at least one skill set provided in the received skill set list is displayed in a visually perceptible format.

Provisions are provided for customizing and linking, where feasible, a subset of reports and accompanying illustrations for a particular user, and for adding or deleting other reports, as needed. This allows a user to focus on the 15 reports of immediate concern and to avoid sorting through reports and related information that is not of concern.

Implementation of this separate-storage option would allow most or all users who have review access to a document to write, edit, and otherwise modify the original version, by storing the modified version only in the user's own memory space. Where a user who does not have at least review-access to a report explicitly requests that report, the system optionally informs this user of the lack of review access and recommends that the user contact the system administrator. The system optionally stores preceding versions of a present report for the preceding N periods for historical purposes. The comparative analysis includes an ability to retrieve and reformat numerical data for a contemplated comparison.

Program Management Tool (PMT) acts as the nerve system of complex organizations.

APPLICATIONS

The technology has several potential applications:

- Project, programs, and strategic management
- Research and development
- Risk management
- Budget and analysis
- Portfolio management

PUBLICATIONS

U.S. Patent 7,596,416 and 8,224,472
ARC-14950-1 and ARC-14950-2

"The NASA program management tool: a new vision in business intelligence," 2006 Aerospace Conference, IEEE DOI: 10.1109/AERO.2006.1656169

More Information

National Aeronautics and Space Administration

Technology Partnerships Office

Ames Research Center

MS 202A-3
Moffett Field, CA 94035
1-855-627-2249
ARC-TechTransfer@mail.nasa.gov

http://technology.nasa.gov/
www.nasa.gov/ames-partnerships/

www.nasa.gov

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