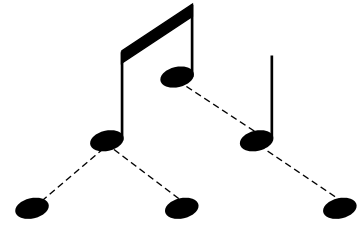


Process Plant Project Manager (3PM)



Process Plant Project Manager (3PM) is a prototype of a knowledge-based project management system whose goal is to support the planning and coordination of projects where large construction-site oriented products are built. The current application area consists of process plant implementation projects.

Product and process modeling

The basic idea in 3PM is to connect the components of the product to the activities of the implementation project. The linking between components and activities helps to

- integrate procurement, cost and schedule management in a project
- display the progress of the work from the perspective of the product
- create automatically the activity network for a project

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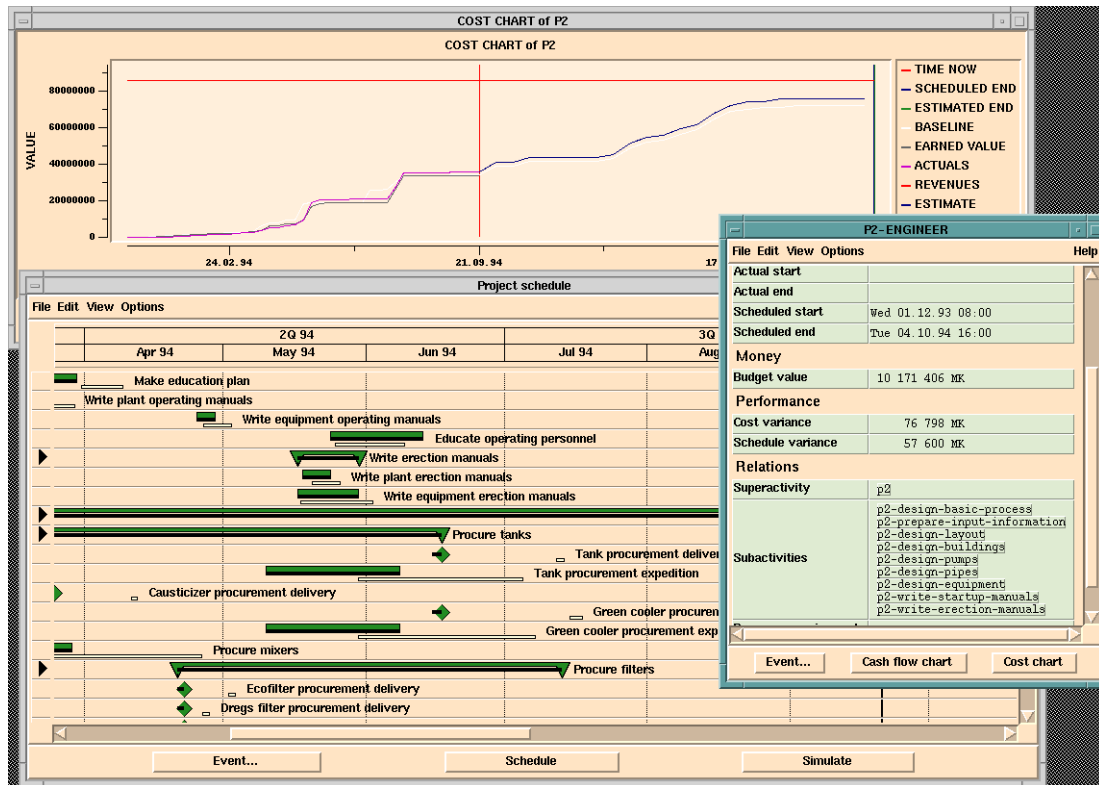
History maintenance

3PM records the state of the project before each modification (user operation, scheduling, etc.) that is made to the project information. The user is able to move between the states and to create alternative branches of "history" to try out different planning decisions. The history maintenance uses an orthogonal and general undo/redo-mechanisms that supports in an efficient way

- undo and redo operations at user interface level
- the returning to a previous state of the project for review and analysis
- what-if analyses during project planning

Change management

The planning functionality (under work at the moment) of 3PM has been designed in a way that support the replanning of the project. When a new version of project plan is made, only differential modifications to the existing plans are recorded. The user will be able to find out all the consequences of a modification in the structure of the product, for instance. The influences of the change can be analyzed in advance and alternative ways to carry out the change can be contrasted and evaluated. This helps to implement the inevitable changes in a quick, consistent and economic way.



Object-oriented implementation

3PM has been implemented with a uniform object-oriented approach using an object-oriented analysis and design method, an object-oriented programming language and an object-oriented data management system.

Schedule

3PM is currently in a prototype stage and under development. The final demonstrator in MUSYK will be completed by the end of 1994. Development of 3PM continues until May 1995.

Contacts

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