Reference
8810-7310

Patent status
Use case validated software

Stage of Development
Excel based prototype developed, with mobile App and voice command functionality (allowing for updates from the field site)

Seeking industrial partner for developing a commercial-level prototype

Contact
Scott Inwood
Director of Commercialization
Waterloo Commercialization Office
519-888-4567, ext. 43728
sinwood@uwaterloo.ca
uwaterloo.ca/research

EasyPlan Project Management System

Background

Managing construction projects within strict deadlines and limited budgets is a huge challenge and many projects experience cost overruns and delays. For contractors to compete nationally and internationally in the multi-billion dollar construction industry, they need tools to efficiently manage project resources, increase productivity, meet constraints, and bring projects to profitability. Existing project management software does not provide a level of data analysis granularity to provide decision support for optimizing operations, automate progress tracking, and identify cost-effective corrective actions to keep projects on track.

Description of the invention

Waterloo's "Easy Plan" project management software utilizes a novel "critical path segmentation" (CPS) methodology that allows tasks to be further sub-divided for further dynamic optimization and resource re-allocation functionality. The CPS methodology overcome the key drawbacks of existing commercial systems through: powerful optimization of construction plans; audio/visual tracking of progress; more accurate computation of project schedules; integration of project management concepts; and management of multiple repetitive infrastructure projects. EasyPlan targets variety of users including construction companies, municipalities, and project management firms who require a simple yet advanced tool to support decisions related to cost-effective management of projects

Advantages

- Support audio/visual progress tracking for projects
- Unique optimization feature to meet construction constraints
- 3D/GIS features to manage repetitive infrastructure projects
- Unique ability to analyse delays and decide corrective actions
- Fully integrated concepts from estimating to project delivery
- Can interoperate with existing project management software (eg. plug-in to MS-Project or Primavera)

Potential applications

- Schedule analysis and construction optimization tools
- Progress tracking and visual communication tools