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Effective Project Management with Theory of Constraints

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Abstract

Critical Chain Project Management (CCPM) is a TOC tool used for planning and project management. It can be used both in one-project and multi-project structures where resources are being used in several projects simultaneously.

In one-project structures, this tool includes:

- 1) The elimination of the existing behavioral standards that are harmful to achieving the objectives of the project (finishing the job at the last moment, unreasonable delays in order to use maximum available time);
- 2) Plan (Project Network), which takes into account the relationship between all the resources and tasks, as well as time to perform tasks with attention to "safety net" in time;
- 3) The schedule of work, which is displays Critical Chain and buffers (half "safety net" time taken from individual tasks).

For multi-project structures, this tool includes all the elements of the same tool designated to be used in a one-project structures, plus a tool to synchronize the implementation of projects - "drum", which can be either physical (resource) or virtual (a rule which states that it is inefficient to work on more than six projects).

Both structures have an additional element that provides control and monitoring, - buffer management. Project Management Critical Chain method requires periodic updating of the time set for the completion of the tasks. This information is used to update the status of the various buffers, and provides information on when it is truly necessary to apply some corrective action.

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