

## PM WORLD TODAY – VIEWPOINTS – MAY 2009

## My World is a Square, so is my Critical Path!

*By Peter Berndt de Souza Mello*

I cannot understand the audacity of those who consider critical path to be a registered word. It is time for us to float! Give me some slack, for God's Sake!

We are all aware of the importance of the Critical Path Method. That doesn't give anyone the right to state that only if you find a sequence of activities with no float will you have the critical path for a project!

My project has a critical path the moment I even think of it for the first time! By establishing my desired initial date and my desired finish date, I already have a critical path. I simply don't know yet what is in there.

Unfortunately, by searching the internet for a definition of "critical path", I will find nine in ten references stating that "critical path is the sequence of activities with zero or no float". Is that all? Will it always be true?

I am tired of CPM experts who say that if a project has float in the critical path, then you are looking at the wrong sequence of activities in the project. Is it God's truth that such path can only exist with no slack?

First of all, if I recall a bit of history, when James E. Kelly and others at Dupont were developing such method, the goal was "to establish the longest sequence of activities necessary to achieve the shortest possible duration for the project". There was no concept of float in that goal; there was no question about how to achieve such result. Finding activities with zero float is, in fact, a byproduct of the method. It is the means by which one finds **part of the answer** to the true question.

Surely CPM will work in many scenarios, especially with no complex real life conditions besides dependencies in tasks. I am also sure that CPM is much better than nothing, but it is not nearly the best either.

And please, don't think I am writing all this to say that CCPM, SDPM, RCS or RCP would be better. I am not going to explain such concepts, methods, acronyms or their results. This text is not about finding the perfect solution for discovering the true critical path. It is about restoring the meaning of critical path: It should be whatever set of tasks one must pay

special attention to preserve the goals for schedule, cost and scope (along with other project objectives).

The critical path method should help locate critical activities. It will seldom find all of them, but it should help identify most or the most important ones. These critical activities may even have no slack, so I know they may endanger my project at any second of delay. But they may also be critical because they consume a great deal of money, or take the most of high qualified resources, or may be riskier than others. If I can use CPM to mathematically find many of the activities that are critical, great; If I can use RCP methods to mathematically find even better answers to my questions, wonderful. If nothing works, I still need to be capable of discovering what the critical activities are in what will be my project's critical path.

No copyrights! No hardcore fights to defend any methods! Let's stand for a round world that understands that every project will have one or many critical paths to watch out for, with or without slack!

Once we understand this concept, then we can provoke mathematicians and vendors to actually find us answers. My critical path must have some slack! What about yours?

*Author's note: If you read this text through the end, I would appreciate your feedback ([peter.mello@x25.com.br](mailto:peter.mello@x25.com.br)). I plan to expand this subject into an article that truly discusses hot issues related to the Critical Path Method, Critical Chain Method, Resource Critical Path and other related methods when modeling part of our reality into some schedule that will help me delivering the expected results. What I know is that some people believe the term "Critical Path" could only be used in the sense of "zero slack" and some will accept a broader meaning to the term. I would love to hear both "parties" although I have already picked a side! Any historical reference, links, opinions, complains and suggestions will be heard!*

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