White Paper 2016-06

How to Use Float Monitoring Techniques

There is an incredible value of using the available scheduling update information to track the evolution of the float to specific key Project delivery points. This simply involves a better utilization of available information without more updating work. It will often open the eyes of the Project manager early on impeding issues and allow timely actions to be taken to avert the pitfall. Thus Project Management can become responsive in anticipation instead of reacting after the event.

On top of a basic usage of convergence planning, float monitoring is a very powerful technique that can anticipate with advance notice future deviations in key deliverables. What is difficult is to identify which are those deliverables that would need to be tracked. As a first approach, the deliverables identified in the Convergence Plan are excellent candidates. They can be complemented with other deliverables that are considered particularly key for the Project.

> **This amazingly simple method is extremely powerful and allows much earlier anticipation of issues in Projects. Its power is that it uses available information in a visual manner.**

Warning: float monitoring only works properly if the Integrated Project Schedule updating process works properly, and if the forecasting process is implemented with at least productivity-based re-forecasting. The recommendations developed about building a quality Integrated Project Schedule must have been followed properly.

The two float monitoring approaches

There are two ways of monitoring float:

- Monitoring activities' floats as calculated by the Integrated Project Schedule program, either:
  - Total Finish Float as an adequate measure of how much float is available before impacting the Project completion date; or,
  - Free Finish Float to measure the time available before the next activity;
- Monitoring the available float with respect to a fixed date, e.g. a convergence plan gate or any other meaningful signpost.

The advantage of monitoring float as it evolves with the schedule (first method, and the one that is used by the scheduling software naturally) is that it gives a good reflection of the actual available time; however it does not oppose the fallacy of 'virtual float': as activities (generally) move to the right, more time will be available and it is not a good practice to leave additional time to those streams that are not driving the schedule (refer to our White Paper 2016-07 on virtual float).

This is why we will prefer the second method where float is measured against a fixed date, which can be conveniently set as being a convergence plan gate date.

How Float Monitoring Allows to Anticipate Delays

The deliverables that have been identified are associated with the finish date of the relevant activities in the Integrated Project Schedule. The finish date of these activities can be downloaded at the end of each schedule update and re-forecasting cycle, and compared to the required delivery date (for example in Excel). The difference between the latest forecast of the finish date and the required delivery date is the current float for that particular deliverable. In this method, the required delivery date is fixed and not allowed to vary.

Tracking the float and how it evolves from one Integrated Project Schedule update to the next will give very quickly, after 3 or 4 update periods, a very good idea of the trend. It is amazingly easy to anticipate in advance whether the trend is that the deliverable will be on time or not, as shown in the following schematics:

Different types of float monitoring techniques
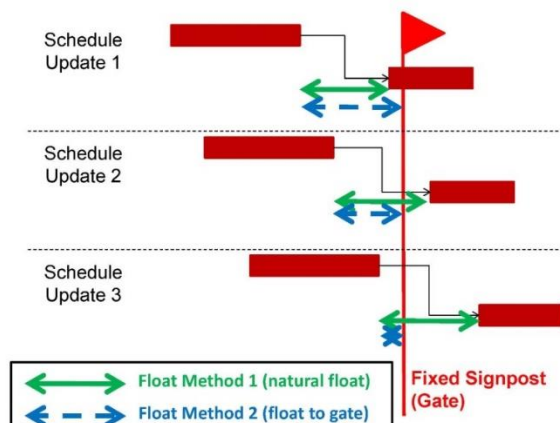
Float Monitoring Example
Deliverable that is delayed without impacting the critical path
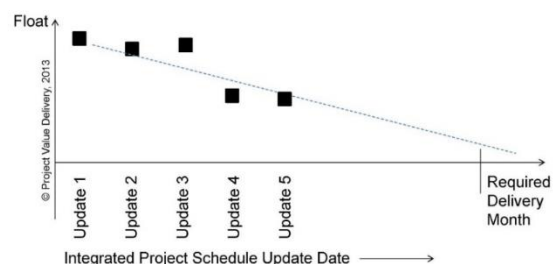
Float Monitoring Example
Deliverable that is delayed and will impact the critical path
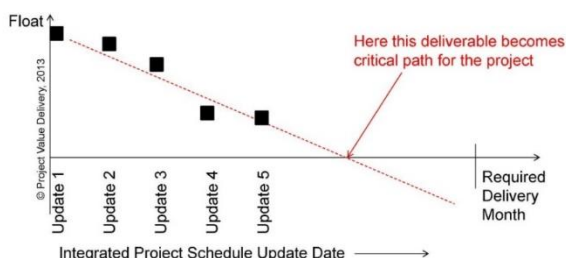
These individual deliverables' diagrams can be combined in a high level dashboard which identifies clearly what are the trends that do not evolve properly and require investigation and possible action:

Float Monitoring High Level Dashboard
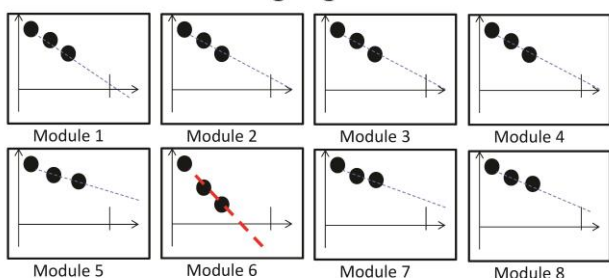
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This dashboard can be used for Visual Management, being posted and regularly updated on the Project Offices' walls.

Conclusion

This amazingly simple method is extremely powerful and allows much earlier anticipation of issues in Projects. Its power is that it uses available information in a visual manner. It is rare on Projects that the evolution of activities from one update of the Integrated Project Schedule to the next is considered and this method does make use of this available but unused information. It is a kind of ecological re-use of available information painfully created by the team and not really used to its maximum.

Float monitoring leads us to quote one of our Project Value Delivery most favourite principles, which unfortunately has to be highlighted to too many Project teams during Project reviews:

> **"An activity that is delayed by one month every month will never happen."**
> **(Project Value Delivery)**

How many activities in your schedule re-forecast get simply pushed by another month every month?

Further reading

Our White Paper 2012-26 'From a Static to a Dynamic Vision of Project Schedules: Why Conventional Usage of Schedules is a Real Waste of Time and Resources Compared to the Value it Easily Could Provide'

Find all these principles of Advanced Scheduling exposed in a comprehensive manner in our Handbook,
Advanced Project Scheduling for Project Managers
(2nd edition available
in Paperback and Kindle versions!)

[all links to Amazon.com]

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