White Paper 2016-07

How to Fight the Fallacy of Virtual Float

Virtual Float is the bane of Project management. It appears when one sequence of activities gets delayed: virtual float, additional time is created in all other activity sequences. Project contributors then tend to use this additional time in their favour. This inevitably results in cost overruns and additional delay risks. It is essential for the Project Manager to make sure that additional float is created in Project sequences only under controlled conditions. In this essential White Paper we describe a number of methods to identify and tame virtual float in Projects.

Virtual Float and its Effects

In Project life, activities generally tend to shift to the right – to a later date. This actually will create float in all the activities which are not critical. This has a detrimental effect because it means that most Project contributors will in effect be given more time to complete their tasks. The effects of this situation are well known:

- Because they are given more time, people will take more time to do their task (Parkinson's law);
- Or, they will start later which does not improve the odds of the task being finished on time (Student's effect),
- And, interfaces will be another excuse not to finalize work that could be finalized, thus, the disease will spread throughout the Project.

We call this situation creating 'virtual' float. It is a vicious circle. The more the Project is late, the more 'virtual' float is created, the more time and money will be spent to achieve the same results – in particular, because usage of this 'virtual float' is considered to be flexible and is not restricted by the Project Manager.

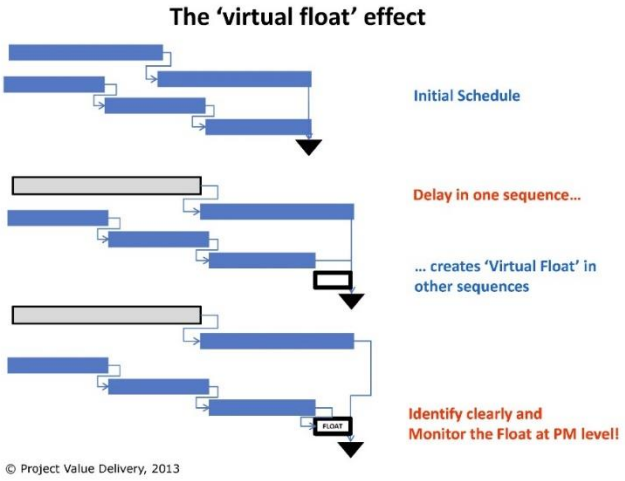
'Virtual Float' cannot be left unchecked and its utilization must remain under the control of the Project Manager.

How to Overcome the Virtual Float's vicious circle

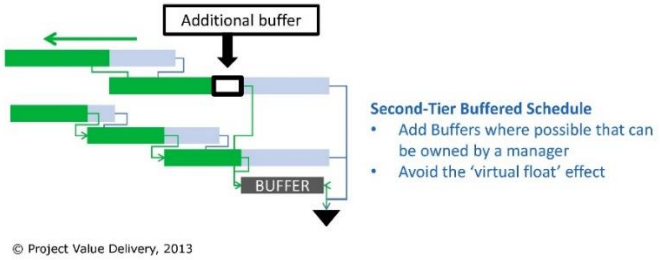
How can a Project overcome this vicious circle?

- The Convergence Plan if it is applied with discipline is an excellent way to maintain the pressure on all Project deliverables even if one sequence of activities faces a hurdle – because the dates at which the deliverables need to be achieved remain fixed,
- When re-forecasting the schedule,
  - instead of letting the entire network of activities spread in time, add "buffer" resources on all non-affected sequences of events (owned by Project management) to force these sequences of activities to remain on the same overall schedule,
  - alternatively, force a constraint on the finish date so that delayed activities show negative float and no 'virtual float' is created in the schedule network. This practice has the advantage to tag delaying activities with negative float, which gives a clearer delay analysis for Extension of Time claims. On the other hand it introduces constraints and negative float in the schedule, making it unrealistic overall so it needs to be used with prudence and only when required by contractual strategies.

We prefer the method where buffers are added to constraint non affected sequences of events. This essential practice is explained in the following figure.



These local buffers avoid the effect of 'virtual float' creation and maintain the tension on the Project. When activities get delayed tension may be released on other activity sequences. The usage of any additional time must definitely remain under the permission of the Project Manager.



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Conclusion

'Virtual Float' is the bane of Project management. In some cases it would look like everybody is waiting for the first one to declare some delays so as to benefit from additional breathing space.
'Virtual Float' cannot be left unchecked and its utilization must remain under the control of the Project Manager. He needs to be able to decide whether it is appropriate to use it or not. The discipline of the Convergence Plan is here of much value, because it sets strict dates for the availability of key deliverables in the Project.