Kitchen remodeling

Kitchen Remodeling Network Diagram Critical Analysis Boston University OL MET AD 642 Art &Scienceof Project Management Week 3. 2 - Network for Party Project Abstract This article examines the Critical Path, Slack, and sequencing of activities for the Kitchen Remodeling Project. It furthers the discussion on whether adding additional slack helps set realisticgoalsor proves detrimental to the progress of the project. A detailed analysis is also provided on the relationship between the Critical Path and Slack.

I created a Network Diagram for my Personal Kitchen Remodeling Project. During the creation of my Network Diagram, I ran into the issue of having too many activities to sequence. Accommodating granular detail on the Network Diagram became unmanageable, especially for not using Microsoft Project. For example, in the WBS, I broke down the node ' Secure Workers' into different skill set (Carpenter, Electrician etc). I simplified this into one activity labeled " Secure Workers" and identified predecessors and successors.

I also consolidated installation of appliance into a single node and assigned it a number of days in totality. The total project duration on the Critical Path came out to 83 days on the forward pass, starting at day 0. Backward pass was calculated using customer's expected completion time of 73 days. The Critical Path, with the longest path and shortest time fell on the path with the least amount of slack equating to -10 days. This means that to meet the customer's expected completion date, the project would have to start 10 days in advance of the currently scheduled start date.

If the project cannot start in advance, activity duration on the Critical Path would need to be adjusted in order to meet the customer's expectations. The key take away from this assignment was that all activities on the Critical

Path always have the same Slack, -10 in this example. After much contemplation, I understood this is for when the Latest Finish is moved forward, all activities on the Critical Path require adjustment by the different between the Latest Finish and Earliest finish of the last activity on the Critical Path.

Completion of the Critical Path made me question how the PM would know whether the least amount of slack on the Critical Path is sufficient to complete the project on time, while maintaining quality. Ideally, every PM wants to finish the project at the earliest date possible, but adequate time allocation for each activity and in between activity sounds just as crucial. A Project Management Institute article comments that small buffers should be added in between activities and parallel work for resources committed to the critical path should be avoided.

To stay ahead, there may be the urge to start all activities as soon as possible, this could be detrimental to the progress in the long run. " To the extent possible, avoid having the same people work on the parallel activities is one of the tenants of critical chain project management. This means restraint in starting activities. Small buffers at the end of ' feeding chains' merging with deterministic critical path minimize risk of project delays. " (Schuyler, 2000) The reality is that there is never a comfortable amount of slack available for any activity on the critical path.

As a new PM, I'm likely to believe that adding enough buffer time would alleviate pressure and help set reasonable targets. To which PMI annotates, " The core theme in critical chain project management is to avoid wasting slack. The reality is that there isn't a confident amount of slack available to

waste. Focusing on project values provides a better perspective for making decisions. " (Schuyler, 2000) References John Schuyler, PMP, (March 2000). Optimizing Project Plan Decision. PM Network. pp. 65-69.