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Managing the Plan

Exercise

Leading a Development Team  
Software Engineering Institute

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Managing the Plan

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| **Overview** | As is true in most management situations, there is no right or wrong answer to this exercise. However, before acting, it is important to consider the facts of the situation, the individuals, and the status of the team. Remember that team leaders rarely have to make instant decisions and that you can usually discuss issues with your own manager. Also, it always helps to discuss the issues with the team before you decide what to do. |

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| **Question #1** | ***What is the current schedule status? Is the team ahead, behind, or on schedule? If ahead or behind, then by how much? Explain how you arrived at your answer.***  **Solution**  In earned value, the team is currently behind by:  26.8 -22.0 = 4.8 EV  The team is currently working at a rate of:  22.0 EV / 6 weeks = 3.67 EV per week  The team is behind by:  4.8 / 3.67 = 1.3 weeks |

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| **Question #2** | ***What is your projection for when the team will finish? Explain how you arrived at the answer. Make sure you take into account the team member that recently returned from vacation.***  **Solution**  To complete the project, the team must earn:  100 – 22.0 = 78 EV  Working at the current rate, it will take the team this long to complete the additional work:  78 EV / 3.67 = 21.25 weeks  The team just completed week 6, so they will finish at week:  6 + 21.25 weeks = 27.25 week |

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| **Question #2,cont.** | The predicted team completion date on the *Week* form is 7/23/07. This is 35 weeks later than intended completion and is extremely pessimistic compared to the 27.25 weeks that were calculated above. The difference in the projections is a concern that must be understood and resolved.  A detailed review of the plans shows that one developer will not complete their work until week 55. Most of the individual predicted end dates are in December and January, and this is consistent with the slippage that was calculated. One developer’s predicted date is in July. This developer, AG, went on vacation after launch and only recently returned. AG’s end date prediction is based on only a single week of work. The data is not significant enough to rely on for end-date predictions. |

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| **Question #3** | ***If the team is ahead or behind schedule, what appears to be the cause?***  **Solution**  There are several things that can cause a team to fall behind schedule. The *Week* tab in the TSP Excel tool contains a helpful summary.  Added tasks cause plan growth (i.e., Task Hours % Change on the form), and can cause a project to end on a later date. However, in this case, plan growth doesn’t appear to contribute significantly to the schedule slippage. Comparing *Current* to *Baseline* indicates 53 hours of project growth. This only accounts for about half a normal team week at planned project completion. The planned end date still matches the baseline end date so this cannot account for the schedule problems.  Estimation error can be evaluated by evaluating the *To-date hours for tasks completed* field. Note that tasks have been overestimated by 18%. But overestimation of effort is certainly not causing the problem of the team being behind schedule. (If the team had underestimated the effort, then schedule performance would have appeared worse than it is.)  From the summary, we can calculate the effort that has been applied to unfinished tasks as 318.7 – 286.4 = 32.3 hours. This is less than half a team work week and is reasonable. Unfinished tasks could account for some of the schedule slip, but it is more than offset by 52.3 hours of overestimation on the closed tasks.  The root cause of the schedule problem is that the total team effort available to be applied to task work has been overestimated by 123.1 hours or 39%. The team has been unable to achieve the effort that was committed to during the launch. |

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| **Question #4** | ***As team leader, how would you handle this situation?***  **Solution**  The challenge for the team is to increase its task hours. Simply asking the team for additional task hours is unlikely to produce the desired result.  The team lead should approach this as a group problem-solving challenge. For example, the team leader could facilitate a team discussion where members list reasons (on a flip chart) as to why they have not been able to achieve the task hours committed to during the launch. After root cause analysis, the leader can encourage the team to suggest solutions to resolve task hour problems. Finally, the team lead should help the team implement the suggestions. In some cases, the team leader might need to request management support to resolve the issue. |