

## WBS 8.3, Value Analysis Reporting

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Unlike typical business programs a project's earned value analysis tools are not tied to annual budget or sales cycle; "project activities are planned with start and stop dates and resources are assigned and removed from the project plan throughout the project life-cycle."

(Sheen) This means that these analysis tools don't indicate profit or assets accumulation or losses but track the time versus progress on a project in reference to funds expended to work complete compared to established project schedules through the reporting period. The use of earned value analysis techniques in a project integrates cost and schedule data to create a performance report. (Dow & Taylor, 2013, p591)

### **Value Analysis Tools**

Some of the tools used in a value analysis report are, earned value (EV), planned value (PV), actual cost (AC), cost variance (CV), schedule variance (SV), cost performance index (CPI) and schedule performance index (SPI). When calculating these factors the project manager takes into account labor hours and money spent on contracts, machinery, materials, planning and executing the project, all based on the scheduled project cost and time in the project management plan. The documents and costs may change but only after approved change requests have been executed in which the scope and costs may also have changed and should be reflected in the analysis.

By using three predominate factors EV, PV and AC, a PM can paint a picture for stakeholders whether the project is within budget, on schedule and if not by how much of a difference or variance. Comparing the EV with the AC the CV can be determined.  $CV = EV - AC$  This is the difference between the project's or task's earned value to the actual cost of the project to date; which indicates whether it is on budget or not. Then by equating the EV to the PV you get the SV.  $SV = EV - PV$  This information indicated what the current earned value of a project is

over its planned value from the proposed schedule established in the project management documents; telling us if we are on, behind or ahead of schedule. By dividing these factors we get a ratio in percentages which can indicate schedule and cost trends. If caught early enough a strategy can be developed to either take advantage of opportunities or adjust for short comings in a projected budget or schedule.

Another use of these tools is to create presentations. Using tables and graph and charts and reports the project manager (PM) informs stakeholders on the project progress, need for funding, reasons a project delays and/or opportunities within the project that may be developed. Each report must be tailored to the stakeholder and the purpose for the communication being delivered. In order for the reported to be effective there needs to be a reference point. “The project manager creates a baseline schedule [and cost] from the original schedule and once the project starts, the project is ready for performance reports.”(Dow & Taylor, 2013, p591)

Correcting budget overages or scheduling shortfalls are not always a priority. For example, if during a project new innovations have been discovered that cost a little more but will potentially bring in greater profits a stake holder may choose to allow the overrun to continue. If a project appears to be behind schedule but the estimate actual cost at the completion time, which is a whole other set of calculations, will be increased beyond acceptability by instituting corrective actions the disparity may be allowed to continue. All of this information needs to be conveyed to the proper stakeholders. If necessary corrective actions are beyond the PM’s scope of control, as spelled out in the project management plan, then the stakeholders must make the decision to either correct or except the disparities or terminate the project.

## **Reporting to Stakeholders**

Project managers must ensure the stakeholders understand the information acquired during value analysis reporting. Giving raw data to some stakeholders might be successful if the stakeholder is experienced in reading this data. However, not all stakeholders will be able to recognize and evaluate the numbers in the charts or diagrams. PMs must include explanations of what the data is by adding comments boxes in charts, descriptive notes and commentary to tables and fully explain the implications of the combined data in either verbal briefings or notations in the report.

The key indicators in value analysis report can be overwhelming if all the numbers are presented simultaneously. The PM must also ensure that accurate figures are also comprehensive. All the task in a project will be analyzed but it's not necessary to report on each item when discussing project progress with a stakeholder. The PM must make sure that the information the stakeholder is interested in and has requested along with any related information the effects those requested pieces of information is what is clarified.

Understanding the stakeholder's capability to evaluate the data will determine how much the PM will need to expound on the information in a report. During the stakeholder analysis the project team should ask if stakeholders are familiar with the types of reports, charts, and tables that will be used and if any additional explanations will be need. Then when the reports forwarded insure that information is included. A diagram with definitive explanation can adequately represent the status of a project and allow a stakeholder to make informed decisions.

## **Conclusion**

Project value analysis isn't used the same as business earned value analysis. The tools are similar but the purpose for the information is what set project reports apart. Stakeholders

have a varied level of understanding of the data accumulated in a project analysis and may not see how it effects the project at large. The PM must evaluate the capability of each stakeholder to understand and interpret the impact of the date presented in the analyses. Visual charts and tables with adequate explanations or briefings can help complete the communication process with regards to these reports and provide the stakeholder the information needed to make strategic decisions. Effective communication is the foundation for successful projects therefore it is the PM's responsibility to make sure the appropriate information is presented and understood to the stakeholder.

### **Reference**

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