

Variance Analysis for Schedule Change
from PMGT614

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PMGT690

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Variance Analysis for Schedule Change

by

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The below variance analysis was conducted as an assignment in PMGT614 to analyze project schedule variance. The included data and charts show that the current ahead of schedule has increased the budget and the Earned Value of the project. The current Project variance shows at day 9 the project performance shows +5% ahead of schedule and -15% over budget.

The Analysis says that the Estimate to Complete (ETC) cost would be \$4,464.99, two weeks early, meeting the holiday deadlines from customer and still be below the overall project Budget of \$4835.35

Note : There is a slight variance in the WBS costs and 19th day cumulative cost due to minor decimal point discrepancies in the cost breakdown. 3882.04 vs 3882.60. This continues through the calculations i.e spread sheet ETC of 4464.99 vs EAC 4462.79.

BAC	3882.04
EAC	4462.79
PV	1123.70
EV	1179.99
AC	1356.99
CV CUM	177.00
SV CUM	56.29
VAC	(580.75)
CPI CUM	0.87
SPI CUM	1.05
CPI CUR	0.87
SPI CUR	1.05
TCPI	0.82
IEAC CPI CUM	4462.79
IEAC 80/20	4362.28
IEAC CPI X SPI	4362.38

VARIANCE ANALYSIS

4

At day 9 the project performance shows +5% ahead of schedule and -15% over budget.

$SV\% = SV/PV$ or $5\% = SV/1123.70$; $SV = .05 \times 1123.70 = 56.29$

$SV = EV - PV$;

SV= 56.29

$56.29 = EV - 1123.70$; $EV = 56.29 + 1123.70$ $EV = 1179.99$

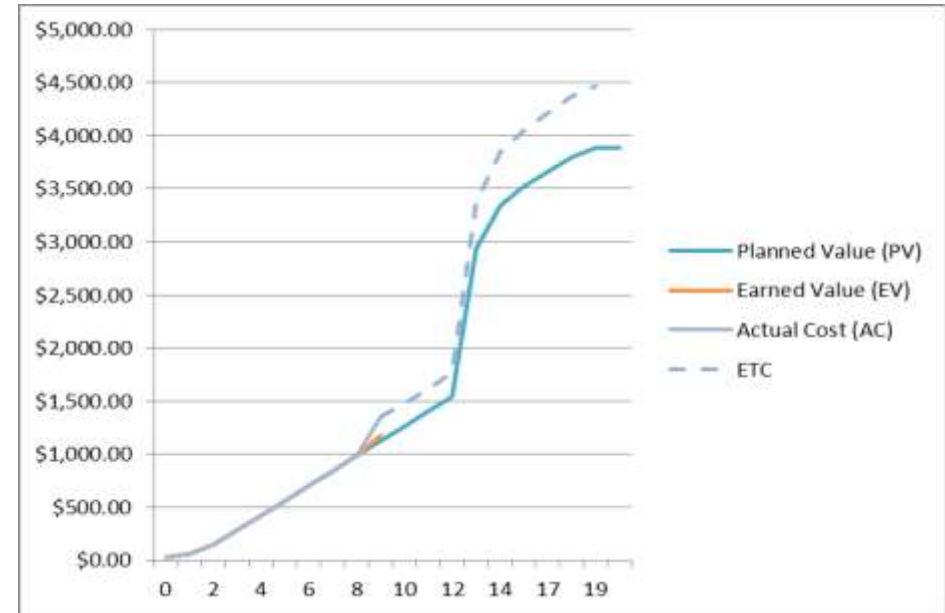
EV= 1179.99

$CV\% = CV/EV$; $-15\% = CV/1179.99$; $CV = -.15 \times 1179.99$;

CV = -177

AC at day 9 = CV + EV = \$1356.99

Note : there is a slight variance in the WBS costs and 19th day cumulative cost due to minor decimal point discrepancies in the cost breakdown. 3882.04 vs 3882.60. This continues through the calculations i.e spread sheet ETC of 4464.99 vs EAC 4462.79.



Bicycle Project	Budget	Duration	start	Finish	Schedule in Weeks																				
Project/Contract																									
Budget base (PBB/CBB)	\$4,835.35																								
Management Reserve (MR)	\$440.00																								
Performance Measure Baseline (PMB)	\$4,395.35	158	7-Nov-16	2-Dec-16	11/7	11/8	11/9	11/10	11/11	11/14	11/15	11/16	11/17	11/18	11/21	11/22	11/23	11/25	11/28	11/29	11/30	12/1	12/2	12/5	
WBS	\$3,822.04	149.9	7-Nov-16	2-Dec-16	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	19	sv	
1.1 Project Management	\$616.00	40	7-Nov-16	2-Dec-16	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80	\$30.80		
1.2 Integration	\$1,540.00	100	9-Nov-16	1-Dec-16			\$54.38	\$108.76	\$108.76	\$108.76	\$108.76	\$108.76	\$108.76	\$108.76	\$108.76	\$108.76	\$108.76		\$108.76	\$108.76	\$108.76	\$54.38			
1.3 frame set	\$594.00	2	25-Nov-16	25-Nov-16													\$594.00								
1.4 Crankset	\$463.00	1	25-Nov-16	25-Nov-16													\$463.00								
1.5 Wheels	\$163.90	0.4	25-Nov-16	28-Nov-16													\$81.95	\$81.95							
1.6 Braking System	\$53.99	2	28-Nov-16	28-Nov-16														\$53.95							
1.7 Shifter System	\$206.94	2.25	28-Nov-16	28-Nov-16														\$206.94							
1.8 Smartphone Docking	\$71.00	1.75	28-Nov-16	29-Nov-16														\$35.50	\$35.50						
1.9 Training Wheels	\$113.21	0.5	25-Nov-16	25-Nov-16													\$113.21								
Contingincey Reserve (CR) Cost and Schedule	\$573.31	7.495		5-Dec-16																					
Cumulative cost	\$4,395.35	158			\$30.80	\$61.60	\$146.78	\$286.34	\$425.90	\$565.46	\$705.02	\$844.58	\$984.14	\$1,123.70	\$1,263.26	\$1,402.82	\$1,542.38	\$2,934.10	\$3,343.24	\$3,518.30	\$3,657.86	\$3,797.42	\$3,882.60	\$3,882.60	
Earned Value					\$30.80	\$61.60	\$146.78	\$286.34	\$425.90	\$565.46	\$705.02	\$844.58	\$984.14	\$1,179.99											
Actual Cost (AC)					\$30.80	\$61.60	\$146.78	\$286.34	\$425.90	\$565.46	\$705.02	\$844.58	\$984.14	\$1,356.99											
Estimate to Complete (ETC)														\$1,356.99	\$1,481.17	\$1,613.24	\$1,773.74	\$3,374.22	\$3,844.73	\$4,046.05	\$4,206.54	\$4,367.30	\$4,464.99		