

TCPI Evaluation and Decision

by

Troy Stempfley

Embry-Riddle Aeronautical University Worldwide

PMGT690

July 5, 2017

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Group 4

Adrienne Smith

Ashley Sweat

Dein Elliot

Marilyn Villagas

Ronald Howze

Troy D. Stempfley

A Paper
Submitted to ERAU Worldwide
in Partial Fulfillment of the Requirements of the
Master Science Degree Course
PMGT 614

Embry-Riddle Aeronautical University
Worldwide
Online Campus
November 2016

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 to complete performance indicator (TCPI) is .82 which means the project is over the baseline budget; an evaluation of the overall estimate to complete (ETC) forecasts that although over the budget baseline the Project has adequate reserves to cover the overage. The Analysis says that the ETC cost would be \$4,464.99, for delivery two weeks early; meeting the holiday deadlines from customer and still is 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

TCPI EVALUATION AND DECISION

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

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

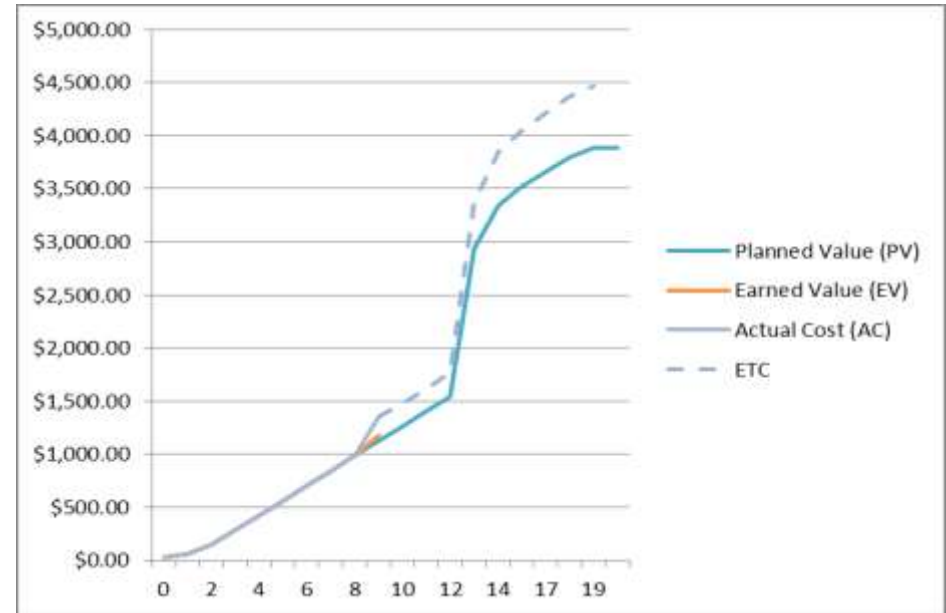
EV = 1179.99

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

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	\$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	\$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							
Contingency 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		