

How a \$10B contract automated their EVM process



<http://ProboData.com>

- Patrick Dill
 - Started on earned value contracts 19 years ago
 - IPM Conference speakers since 2011
 - EVM World speakers since 2010
- Probo Data Group
 - Based in the Silicon Valley
 - Earned Value Automation Experts
 - evData Pro first deployed in 1997

- Agenda
 - Case Study Background
 - Challenges of large contracts
 - evData Pro Solution
 - Internal Studies
 - Conclusion



■ Contract Background

□ SBIRS

- Space Based Infrared System
- Uses Infrared technologies to detect and locate missiles launches
 - Infrared is electromagnetic radiation wavelengths
- Main mission is missile warning and location
- 4 Satellite constellation now
- 5th and 6th satellites coming....
- Lockheed-Martin is prime



■ Contract Background

- \$10B Contract with 2 major subs
 - EMD: ~\$8B, SFP: ~\$2B
- Tools include: Cobra, Artemis CostView, Excel, Winsight, MS-Project, RTP
- 15 Financial Analysts
- 80 CAMs
- 8 Business Area Managers
- Over 300 users of EVM data all over the world



■ Client Challenges

□ Large data volume

- Millions of rows of data...every month

□ Multi-level financial reporting structure

- i.e. work packages, control accounts, OBS, WBS, CLIN, CAMs
- Maintaining this was time consuming

□ Took too much time to identify cost/schedule problems



■ Client Challenges

- Over 300 Threshold Violations per month!
 - VAR Comments stored in email / excel spreadsheets / Word
 - VAR Threshold violations not easy to track
 - VAR Action Items poorly tracked
 - Audits were difficult



■ Client Challenges

□ EVM financial reporting

- Manually generated
- Prone to data/math errors
- Weekly hourly reporting in Excel
- Headcount reporting difficult
- Remote users have difficulty accessing reports
 - Little or no web-based access

□ Financial Analysts doing:

- Excel Macro development
- Access database development



■ Client Solution

□ evData Pro

- Add-on to Cobra, CostView, MPM, etc.
- Imports from these tools
- Exports reports to Excel, Word, PDF, HTML, etc.

□ Easy to use tool that all levels of management can use

- No training classes... on \$10B Contract!!!

□ Reporting

- Over 100 Reports in evData Pro
- Eliminate all manual and Excel based reports
- Use Email to push reports to users

Client Solution

Automated VAR Workflow

- Electronic signature approval process
- Email integrated with VAR process

Required Variances for Jun, 2014 on Contract-B for CLIN All

for Account Type Control Account for All

Show 25 entries

Email Managers VAR Comment Required VAR Required

Search:

BM Approved	Finance Approved	PM Approved	CAM Approved	Action Item Created	Control Account - Description	PM Assigned	CAM Assigned
-	-	-	-	-	T64-EN3-000 - GEO 3 System Integration	Arora, K	Dill, P
-	-	-	-	-	T64-SN2-11F - Structures Flight Science NRE	Wagner, H	Dill, P
-	-	-	-	-	T64-SN2-11R - Mechanisms Material NRE	Mangone, Fr	Dill, P
X	X	X	X	X	T64-SN2-11T - Mechanisms Mfg NRE	Raymond, Danielle	Dill, P
X	X	X	X	X	T64-SN2-11Y - GEO 3 A&T	Souza, M	Robinson, E
X	X	X	X	X	T64-SN2-30C - FTA Hw & Sim Updates	Robinson, E	Mangone, Fr
X	X	X	X	X	T64-SN3-11H - Thermal Analysis Engr NRE	Dill, P	Souza, M

Variance Analysis Report for Jun, 2014 on Contract-B for CLIN All Reported in Thousands

for Account Type Control Account for T64-SN2-11R Mechanisms Material NRE

CAM: Dill, P
PM: Mangone, Fr

Dollars Hours EAC Just Req'd Action Item Material Performance Rate Analysis Sched Tasks All VAR VAR Detail VARx

	Current Period					Cumulative Period					At Completion		
	BCWS	BCWP	ACWP	SV	CV	BCWS	BCWP	ACWP	SV	CV	BAC	EAC	VAC
Labor:	0.00	0.00	0.80	0.00	-0.80	512.38	512.38	1,006.84	0.00	-494.46	512.38	1,008.42	-496.04
Labor Temp:	0.00	0.00	0.00	0.00	0.00	35.00	35.00	133.15	0.00	-98.15	35.00	133.15	-98.15
Materials:	0.00	0.00	0.68	0.00	-0.68	1,936.89	1,931.10	711.08	-5.79	1,220.02	1,936.89	914.66	1,022.23
Subs:	0.00	0.00	0.00	0.00	0.00	15.00	15.00	15.00	0.00	0.00	15.00	15.00	0.00
Svs Cntr:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Travel:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost:	0.00	0.00	1.48	0.00	-1.48	2,499.28	2,493.49	1,866.07	-5.79	627.42	2,499.28	2,071.23	428.04
SPI/CPI/TCPI:				1.00	0.68				1.00	1.34			0.03
Variance:				0.00%	-147.67%*				-0.23%	25.16%*			17.13%

Cumulative Cost Variance Comments

Save

Append Prev Com

- CAM Approval
- PM Approval
- Finance Approval
- BM Approval

Reason:

Account rate variance is \$193.15K and the volume variance is \$-687.60K for a total labor variance of \$-494.45K.
Rule 1 Violation: Account exceeds 10.00% threshold and has a dollar value exceeding \$200.00K because...

Impact to Program:

The impact to the program exceeding the \$200.00K threshold will be ...

Action Required:

The action(s) required to remedy this account will be ...





- Internal Studies:

- Three studies on cost saved over 6 year period
 - THAAD: Terminal High Altitude Area Defense
 - ~\$4B Contract
 - Pays for itself in 10 months
 - \$1.2M cost savings
 - GPSIII: Global Positioning System
 - ~\$3B Contract
 - Reports: \$7k, VAR: \$16k
 - \$1.66M cost savings
 - SBIRS: Space Based Infrared Sensors
 - ~\$10B Contract
 - VAR, Reporting
 - \$2.4M cost savings



■ Conclusions

- EVM automation saves time and money
 - Fewer staff overseeing more contracts
 - Now managing 7 contracts with more reporting requirements
- Better understanding of EVM and contract performance

- Want to see a demo?
 - Send us your contract data
 - We'll demo evData Pro using your data via online meeting
 - Contact information here:
 - Patrick Dill
 - pdill@probodata.com
 - 408-501-8891
 - See demo at <http://ProboData.com>
- Questions?