



## Best Practices In IS/IT Project Management



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IV&V Stories  
“How To Assess a Task List”



Prepared by:  
Dr. Mark L. Huston, PMP



## Introduction

- ✓ **Welcome** – It is an Honor to Be Here!!!!
- ✓ Dr Mark L. Huston, PMP

### What is Independent Validation and Verification

- **IV&V is a third party review of project operations and artifacts to make certain the project is actually working as “advertised.”**
- **It is an “insurance policy” between the vendor and the client to make certain the project is on track and provides what is promised.**
- **I use the word “advertised” as many times the artifacts we see do not really represent or model the project.**
- **If the plans presented are really tasks list and not a viable plan, how do we assess this? And, what is a viable plan versus a task list and why is this a big deal?**



## Two Scenarios

- ✓ I want to present two case studies tonight. One is an extremely well developed and well run plan by Image API used at the Department of Health.
- ✓ The IAPI example works in every way and is really a best practice model.
- ✓ The second story is a about and two projects I was asked to review. ***I have intentionally not named the clients.*** The question I was asked – do the plans model the projects, can they be used to forecast time, cost and scope and is the vendor doing what they promised to do?





## Elements of a Good Plan(1)



- ✓ First, the purpose of using MS Project is to develop a plan that will explain all task dependencies, cost out the project by costing tasks and resources, clearly identify resources and then tracking performance of the project relative to Time-Cost-Scope at specific points in time.
- ✓ Running the MS Project Plan is not the same as running the project.
- ✓ However, for most PMs, the MS Project Plan is required and IV&V uses this as a starting point to evaluate the project and project compliance.
- ✓ The key work is “Transparency”



## Elements of a Good Plan(2)



- ✓ So!!!!, The plan has to be built correctly and must model the project, must cost the project, must calculate completion dates and better yet provide Earned Value Statistics.
- ✓ A 3<sup>rd</sup> Party should be able to pick up the plan and understand exactly what has to be done and if necessary run the plan.
- ✓ Often times in a good RFP, how the plan will be built, used and monitored is a contract deliverable.



## Elements of a Good Plan(3)



- ✓ Woe to the client who does not spell this out, -- as most vendors would rather concentrate on development of end product than costly profit eating “accounting” efforts.



## What is A Good Plan(1)

- ✓ A good plan is well thought out, while it can change it should be fairly stable throughout the life of the project.
- ✓ It identifies all WBS Tasks
- ✓ It cost all Tasks and assigns real resources.
- ✓ It identifies all dependencies (Task, Resource, Date, Module)
- ✓ It has a clearly and defined Critical Path, no danglers
- ✓ It avoids as much as possible the use of Fixed Dates, at least 80 percent of the task must be ASAP and float.
- ✓ The Plan clearly forecast the Completion date based upon task completion and realistic resource assignments

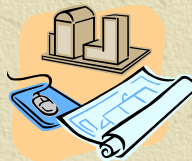


## What is A Good Plan(2)

- ✓ The plan uses Earned Value to create SPI, CPI and CR evaluators.
- ✓ The Earned Value is generated by the MS Project Plan, not plugged.
- ✓ The Plan can be mathematically modeled, i.e Monte Carlo or Latin-Hypercube Analysis
- ✓ Resources are costed at the bill rate.
- ✓ Iterative Build results in a product end-users can use
- ✓ Incremental build blocks time and resources to achieve Milestones.
- ✓ The Plan can be understood and ran by a 3<sup>rd</sup> Party!!!!



## Sample Good Plan



- ✓ [IAPI Project Plan 051908](#)
- ✓ [IAPI Project Plan PERT 051908](#)
- ✓ [IAPI Project Summary 051808](#)
- ✓ [IAPI Project Plan Earned Value 051808](#)
- ✓ [IAPI Project Plan Monte Carlo Simulation Completion and Cost](#)



## Basic Task Extracts

[Open Task Report 051109](#)

[Closed Tasks Report 051109](#)

[Late Task Report 051109](#)

[Percent Complete Report 051109](#)

[Tasks That Must Complete by 053009](#)

[Milestone Report 051109](#)



## What is A Bad Plan(1)

Scenario:

- ✓ State of [REDACTED] contracted with two vendors to develop systems
- ✓ RFPs did not clearly specify how project management and project assessment would be done.
- ✓ Vendors would not produce a project plan because “It was a deliverables based project.”
- ✓ Vendor elected to use a “Task” Approach, that did not use any formal planning claiming this was “iterative development (NOT!).
- ✓ Vendors goal was to get paid for deliverables and at the end of the project complete the assigned work.



## What is A Bad Plan(2)

Scenario:

- ✓ If the assigned work was not completed, it would go to change order. So the client would not get 100% of what they paid for from the onset.
- ✓ Vendor claimed an iterative development process, but there was no end product that client could use until the end of the project.
- ✓ The State PM was ordered to create a MPP with all tasks, costed and resourced but vendor would not cooperate as it was not in contract.
- ✓ RFP did not require use of any testing tools (Risk +) or and Earned Value Based Plan.



## What is A Bad Plan(2)

Scenario:

- ✓ Vendor did not have to account for labor, cost of labor, hours or time.
- ✓ The question then became “What kind of plan do they have and can we validate it in any way.



## First Job – Test the Plan(1)

### First Job is to Test the Plan – For What?

- Does it have a Critical Path?
- Are All Dependencies Identified?
- Does the BCWS = the value of the contract?
- Are All resources identified?
- Are all resources costed?
- Is the plan baselined?
- Does the plan use EVMS?
- Does the plan determine the end date?
- Is the plan being manipulated?
- Can the plan be modeled?



## First Job – Test the Plan(1)

### First Job is to Test the Plan – For What?

- Does it have a Critical Path? - **NO**
- Are All Dependencies Identified? - **NO**
- Does the BCWS = the value of the contract? - **NO**
- Are All resources identified? - **NO**
- Are all resources costed? - **NO**
- Is the plan baselined? - **NO**
- Does the plan use EVMS? - **NO**
- Does the plan determine the end date? - **NO**
- Is the plan being manipulated? - **YES**
- Can the plan be “Modeled” - **NO**



## First Job – Test the Plan(1)



**NO = Expletive Deleted!!!!!!!**



## Here is what we found



033009 XYZ MPP

XYZ PERT

XYZ Project Summary

XYZ Earned Value

XYZ Risk Histogram





## The REAL Story

[032709 Task Summary Report](#)

[032709 Milestone Report](#)

[032709 Open Task Report](#)

[032709 Closed Tasks Report](#)

[032709 Early Task Report](#)

[032709 Late Task Report](#)

[032709 Late Task Hours Analysis](#)

[050809 Weekly Report.pdf](#)



## Dr. Mark's Final Word

- ✓ I don't see how this project was run, I could never validate the figures by myself.
- ✓ No one other than the PM, a PMP I might add, understood the plan.
- ✓ At no time did the % of Task Completed Match the Number Reported.
- ✓ There was no EVMS, but the client was billed on a regular basis for work that was of little value to them.
- ✓ We still don't know the functionality provided vs what was delivered vs. what was promised.
- ✓ However, "Alls Well That Ends Well – Sister Kiss!!!!!"



# Questions?



# Sources



- Project Management Body of Knowledge, 2000 Edition, Project Management Institute, Newtown Square, Pennsylvania, USA, ISBN 1-880410-22-2
- Information Technology Project Management, Schwalbe, Kathy, Course Technology, Cpy 2004, Boston, MA, ISBN:0-619-15984-7, 3rd
- PMP Project Management Professional Study Guide, Heldman, Kim PMP, SYBEX, Copy 2002, Alameda, CA, ISSN: 0-7821-4106-4
- Mastering Project Management, Lewis, James P., McGraw-Hill, New York 1998, ISBN: 0-7863-1188-6
- Customer Centered Products, Hooks, Ivy F, American Management Association, New York, NY, 2001, ISBN:0-8144-0568-1
- Economic Principles and Course Notes, Huston, Mark L, McGraw-Hill, New York, NY, 1, 2 & 3<sup>rd</sup> Edition, 1996, ISBN: 0-07-031813-1
- “Fundamentals of Project Management”, Villanova University, The University Alliance, May 2002
- “Mastering Project Management”, Villanova University, The University Alliance, August 2004
- “Project Management for IS/IT Professionals”, Villanova University, The University Alliance, September 2004
- “Essentials of Business Analysis”, Villanova University, The University Alliance, April 2006
- “Mastering Business Analysis”, Villanova University, The University Alliance, June 2006
- “Managing Multiple Projects, University of Management and Technology, 2009
- “Iterative and Agile Project Management, University of Management and Technology, 2009
- “Earned Value Management Systems, University of Management and Technology, 2009
- “Establishing a Project Office, University of Management and Technology, 2009