ComprehensiveSolutions®
"Business Savvy. IT Smart."®

High Performance Project Management

Presented to the Waukesha County Technical College Project Management Certificate Program Students

October 23, 2006

Prepared by Chip Nickolett, PMP

© 2006 Comprehensive Consulting Solutions, Inc. All rights reserved.

Chip Nickolett's Background

- I've been managing software projects since 1987.
- The largest effort was a program for a multi-billion dollar global company.
  - Several large projects to upgrade, rehost, and standardize ERP systems used in the Americas and Asia/Pacific (APAC) and Japan regions (Europe was excluded).
  - Many complications (languages, cultures, customs, procedures, goals and bias, etc.)
  - Many technical issues (incompatible double-byte language sets, different currencies, time zones and other localization issues, incompatible hardware platforms, many versions of the DB in use).
  - It took 17 months to complete the various related projects (Australia - managed by the client; APAC back-end; APAC front-end; Americas back-end; Americas front-end; Japan). The project was a complete success.
- Began standardizing our PM practice in 2000, focusing on gathering metrics, standardization of documents and procedures, and continual process improvement.
- Became a PMP in 2005.
- Graduated from WCTC in 1984 with an AAS in "Business Data Processing." Later earned a BS in Technical Management from DeVry University, and will complete my MBA (with concentrations in Project Management) this December.

© 2006 Comprehensive Consulting Solutions, Inc. All rights reserved.

Project Management's Value Proposition

Why is PM so important?

- You need to know "where you are going" and "what it will look like when you get there" to really know if you have been successful.
  - This vision needs to be shared amongst Management, Stakeholders, and the Project Team.
- There are too many failures in IT project management. Some of the causes are:
  - Having an undefined or ambiguous scope.
  - Lack of understanding or experience with a new technology.
  - Failing to consider implementation and integration issues.
- Projects need to have tangible benefits.
  - They need to be quantifiable.
  - They need to be realistic.
  - They need to be verifiable.
- Projects need to support Business Goals!
  - Every dollar spent on a project should promote or support your business strategy!
  - Sometimes it is compliance - a requirement for doing business.
  - Sometimes it is to improve efficiency or reduce costs.
  - Sometimes it is to gain a competitive advantage.

ComprehensiveSolutions®
"Business Savvy. IT Smart."®

www.Comp-Soln.com

© 2006 Comprehensive Consulting Solutions, Inc.All rights reserved.

Your Role as a Project Manager

What is your Personal Value Proposition?

- Does the project address a valid need?
  - Often a company will define a solution without having a full understanding of the root cause of their current problems, or an understanding of the costs and complexities associated with a certain solution.
  - You need to ensure that the right questions are being asked, that several alternatives are identified as possible solutions, and that the selected solution addresses the underlying problem or need.
- Does the project add value?
  - Tools like Net Present Value (NPV) and the Internal Rate of Return (IRR) are useful both as a sanity check, and to evaluate projects for resource allocation and scheduling.
- What can be done to maximize the chance for success?
  - Get an approved definition of what success is and promote that vision.
  - Really understand what needs to be done! This sounds obvious, but I've seen too many instances where the project manager clearly does not fully understand the project and makes bad decisions because of it.
  - Set expectations early and then management them on an ongoing basis.
  - Develop a comprehensive approach to managing the project. This includes having a communications plan.
  - Identify and manage risk. Risk management is an often overlooked component of project management.

ComprehensiveSolutions®
"Business Savvy. IT Smart."®

www.Comp-Soln.com

© 2006 Comprehensive Consulting Solutions, Inc.All rights reserved.

What is your Personal Value Proposition? (continued)

- Really manage and control the project.
  - You're not done when the project plan is complete. That is just the start.
  - Define work packages at a granularity that makes sense from a management perspective. Being 50% complete on a 60-day task is far more ambiguous than being 50% complete on a 2-day task.
  - Remember, the WBS that you present to Management (at a higher level of detail) is not the same WBS that you need to work from. Tailor the level of detail to the needs of the audience.
  - Get the best estimates that you can. Experts and historical references are very helpful.
  - Scheduling is often one of the more challenging aspects of a real-world project. CPM, PERT, and Monte Carlo analysis really go hand-in-hand when it comes to scheduling a large project.
  - Lock down whatever you can as soon as you can (e.g., specific resource availability and assignments), but anticipate change and be prepared to deal with it.
  - Closely monitor progress, anticipate problems and then proactively manage them.
  - Encourage communication, but be prepared to manage it to keep it from getting a life of its own.
  - Don't assume anything - check and double-check. Your job depends on it!
  - Gather metrics, validate, and calculate Earned Value. Are you where you need to be? What is the impact on the schedule? What is the impact on dependent tasks? What is the impact on resource availability? Correlate earned value data, your network diagram, and your project calendar. Don't just rely on a GANTT chart - that is often a huge mistake.
  - Communicate status on a regular basis to all project participants.

© 2006 Comprehensive Consulting Solutions, Inc. All rights reserved.

Your Role as a Project Manager

What is your Personal Value Proposition? (continued)

- Really manage and control the project. (continued)
  - Managers, in general, don't like surprises. It is far better to communicate a potential problem that is a few weeks out, along with your plan for dealing with it, than to have them hear about a current problem from a project team member.
  - Take copious notes and place them in a repository for all to see. This helps avoid misunderstandings later.
  - Remember, controlling the project is something that you do for the entire life of the project, not just an activity at the end of the project!
- Look for related opportunities to add value.
  - This needs to be identified during planning or else it is scope creep.
  - This is not "gold plating." Rather, it is a way to included related changes or enhancements that have a business benefit, and can be implemented easier / cheaper / with less risk now.
- Never forget about quality.
  - Become proficient with Six Sigma techniques.
- Validate that the delivered project is truly successful (and fix if not), then promote that success.
- Remember, you are in charge! Project managers are not victims.

ComprehensiveSolutions® "Business Savvy. IT Smart."™
www.Comp-Soln.com
© 2006 Comprehensive Consulting Solutions, Inc. All rights reserved.

Best Practices & Continual Improvement are Key

- Create a Quality Management Plan and live by it.
  - This sets the tone and defines the expectations for anything and everything being done.
  - Helps minimize mistakes, wasted efforts, rework, and delays.
  - Results in higher overall quality of your deliverables, improved efficiency for the project team, and greater overall customer satisfaction.
  - Emphasis should be on prevention over inspection.
- Good estimates are the foundation for project success!
  - Estimates need to be reasonable and have a high level of accuracy.
  - You need to gather and track metrics to really know how well you are doing. We have found that at a project level our accuracy is -5% / +3%. We are constantly looking at what we did well (so we can repeat it) and where we missed the mark (so we can improve) to refine and enhance our estimating skills. We also rely on historical data as a reference.
  - "Fudge factors" should be avoided. Risk should be addressed in an open and direct manner (see estimating worksheet handout).
  - Remember to account for both direct and indirect (such as project management) costs. For example, we see the benefit of project management in the work that we sell. Historically a project manager adds 5% - 10% "overhead" to projects that we have completed.

© 2006 Comprehensive Consulting Solutions, Inc.All rights reserved.

Best Practices & Continual Improvement are Key (continued)

- Learn as much you can about as many things as you can.
  - The goal is not to be an expert about everything, but rather to know enough about many things to ask intelligent questions that may uncover problems or opportunities earlier in the process.
  - Having an understanding of business, finance, sales, and marketing will help you see the "big picture" and better align technology with the business for a comprehensive solution.
  - Understand the technology being used. There are times when you can save money by purchasing an existing packaged solution. There are also times when you can avoid failure by pointing out incompatibilities and integration issues early-on in the process.
  - Don't underestimate the "soft skills." As a project manager you will need to lead and motivate people. As problems arise you will need to deal with them in a constructive manner. You need to make the most of your project team in order to get the most out of your project.
  - Being a good project manager takes a lot of work, but it is an investment in yourself.
- Be able to demonstrate Business Value and Project Payback.
  - NPV and IRR are two values that will be important to the Management Team during project selection.
- Tools are the means, not the end. They are here to help you - that's all.
  - You should be very proficient with Microsoft Project, Excel, and Word.
  - Plug-ins like "Risk +" and "WBS Chart Pro" are well worth their cost.

© 2006 Comprehensive Consulting Solutions, Inc.All rights reserved.

Great Resources

These are books that I highly recommend

- "Project Management: The Managerial Process" by Clifford Gray and Erik Larson (ISBN: 0-07-297863-5). This is a very comprehensive textbook.
- "Earned Value Project Management" by Quentin Fleming and Joel Koppelman (ISBN: 1-93069989-1). This will help you become a more effective project manager.
- "Using the Project Management Maturity Model" by Harold Kerzner (ISBN: 0-471-69161-5).
- "The Art of Project Management" by Scott Berkun (ISBN: 0-596-00786-8). This is a very practical book that focuses on software development.
- "Project Management: A Systems Approach for Planning, Scheduling, and Controlling" by Harold Kerzner (ISBN: 0-471-22577-0). This is one of the most challenging books listed, but it provides more in-depth coverage of the concepts of project management.
- "Discovering the REAL Business Requirements for Software Project Success" by Robin Goldsmith (ISBN: 1-58053-770-7).
- "Dynamic Scheduling with Microsoft Office Project 2003" by Eric Uyttewaal (ISBN: 1-932159-45-2).
- "The Management and Control of Quality" by James Evans and William Lindsay (ISBN: 0-324-20223-7).
- "The Six Sigma Way: Team Fieldbook" by Peter Pande, Robert Neuman, and Roland Cavanagh (ISBN: 0-07-137314-4).
- "Project & Program Risk Management" by R. Max Wideman (ISBN: 1-880410-06-0).
- "Risk Management: Tricks of the Trade for Project Managers" by Rita Mulcahy (ISBN: 0-9711647-9-7).
- And of course, the PMBOK (ISBN: 193069995-6)

ComprehensiveSolutions®
"Business Savvy. IT Smart."®

www.Comp-Soln.com

© 2006 Comprehensive Consulting Solutions, Inc. All rights reserved.

Questions?

I would like to wish each of you the best of luck, and suggest that as you mature in this field that you work to help others learn and grow. I truly believe in the value that Project Management adds to a business. The more good Project Manager examples we have, the better off we will all be as a group.

Thank you for taking the time to listen to this presentation.

ComprehensiveSolutions®
"Business Savvy. IT Smart."®

www.Comp-Soln.com

© 2006 Comprehensive Consulting Solutions, Inc. All rights reserved.