Succeeding in the Jungle of Enterprise Software Selection & Implementation Projects

Presented by:
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TUTORIAL OVERVIEW

Speaker Introduction

John Stenbeck is the President of Pareto Principals, a San Diego-based consulting organization. His qualifications include:

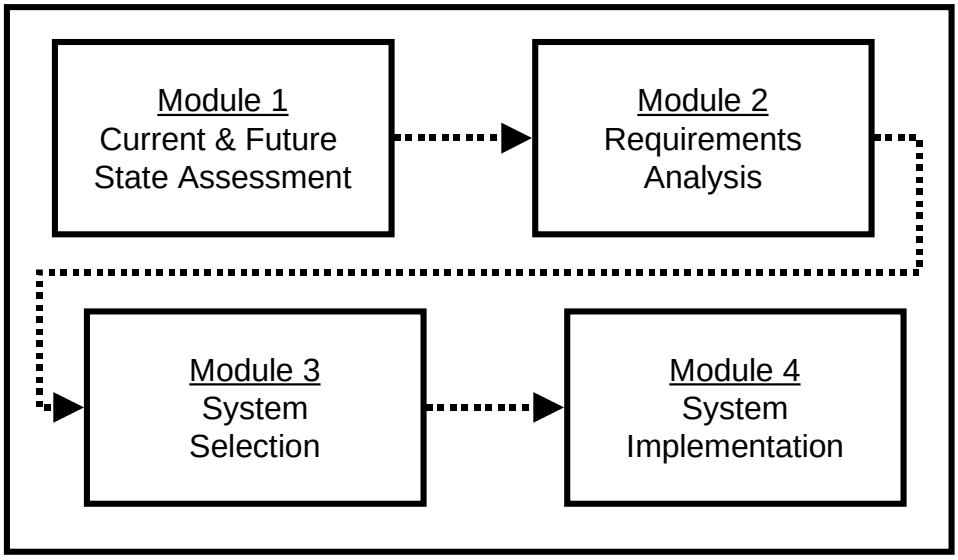
- Holding positions as Director of I.T. and Director of Project Management
- Working with clients that include, among others, VISA-Smart Card Division, Oracle, Lucent Technologies, and U.S. Marine Repair.
- He is an internationally published author and has personally trained over 900 students.
- He is motivated by, and focused on, providing Measurable, Practical, Performance-Enhancing Solutions!

Purpose & Limits of this Tutorial

The purpose of this tutorial includes:

- Provide **VENDOR INDEPENDENT, PLATFORM NEUTRAL** expert guidance.
- Deliver insight on the "life-cycle" of enterprise software systems.
- Expose erroneous assumptions and false constraints.
- Teach "whole picture" thinking about the system, not just the software.

Therefore, in this tutorial we will make the assumption that at the highest level all selection and implementation projects can be characterized by a 4-step model, illustrated as:

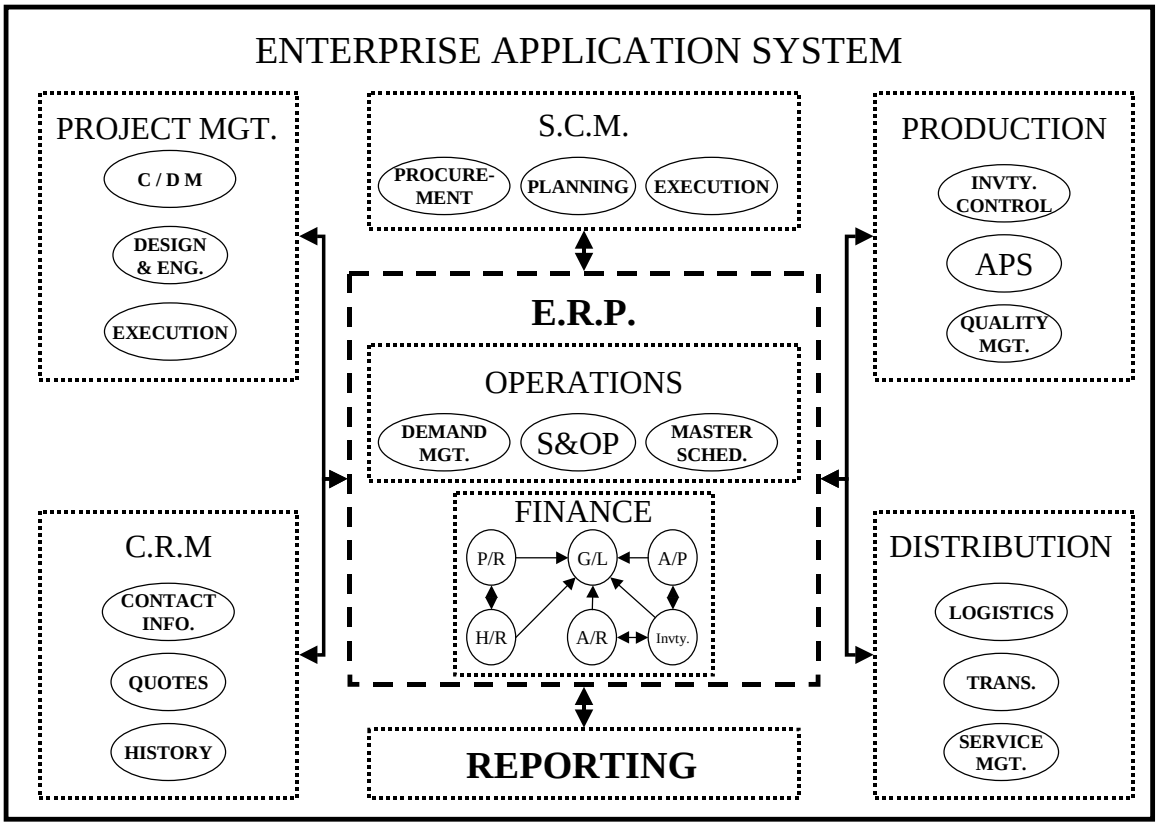


In order to produce measurable, practical benefits within the time constraints of this tutorial we will devote our attention to key concepts.

Module 1 – Current & Future State Assessment

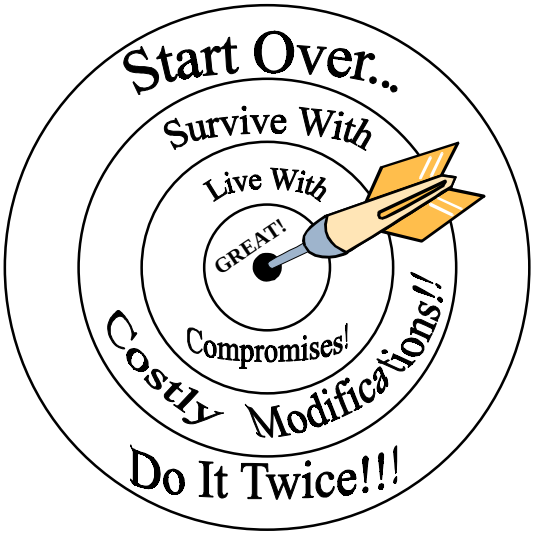
System selection and implementation projects suffer from an abysmal success record. The professional media indicates failures – loosely defined as projects ranging from those that did not meet their original objectives to those that never even got operational – occur in about 65 – 70 percent of projects. This terrible situation is tolerated because the promised rewards are so great, everyone seems to be in the same miserable boat once they get started, and the vendors seem to be in command of the market forces. Let's look at the leading issues contributing to this problem.

- Organizations are not prepared for the complexity of the challenge
- The system selection process is sloppy
- The implementation process is chaotic
- Enterprise software options are vague, confusing, and constantly changing
- Current frustration is driving the change instead of a strategic mandate!



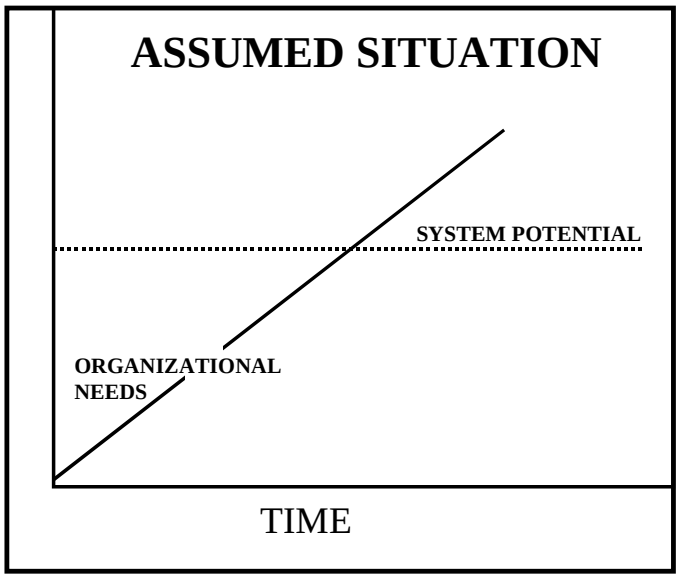
Process Justification

GOOD PROCESS = SUCCESSFUL FINISH!!



BAD PROCESS = DOING IT TWICE!!

We can all agree that nobody wants to do it twice. We also agree that the demands the competitive environment places on your organization increase every year. Therefore, we can assume that over any extended period of time, system potential remains static (since software doesn't automatically improve itself like Star Trek computers do), and organizational needs are constantly increasing. And that is the source of our problem right?!

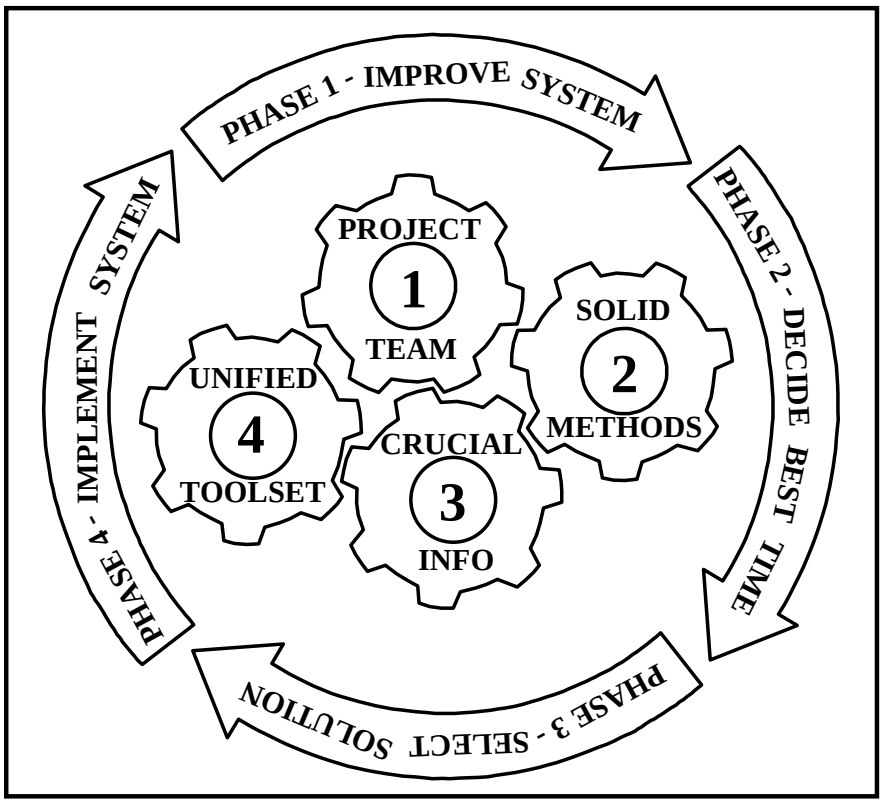


Wrong! Quite often declining system usage due to forgotten training, job transfers, and employee attrition is the culprit!

Process Phases & Resources

There are four phases:

1. Improve Existing System Usage
   - This is the most often overlooked step.
2. Decide The Best Time For System Replacement
   - Invest the time to evaluate cyclical, seasonal, and resource issues.
3. Select The Best Replacement Solution
   - Use a proven method to find the right system and contract effectively.
4. Properly Implement The New System
   - Invest the right resources at the right time.



There are also four resources:

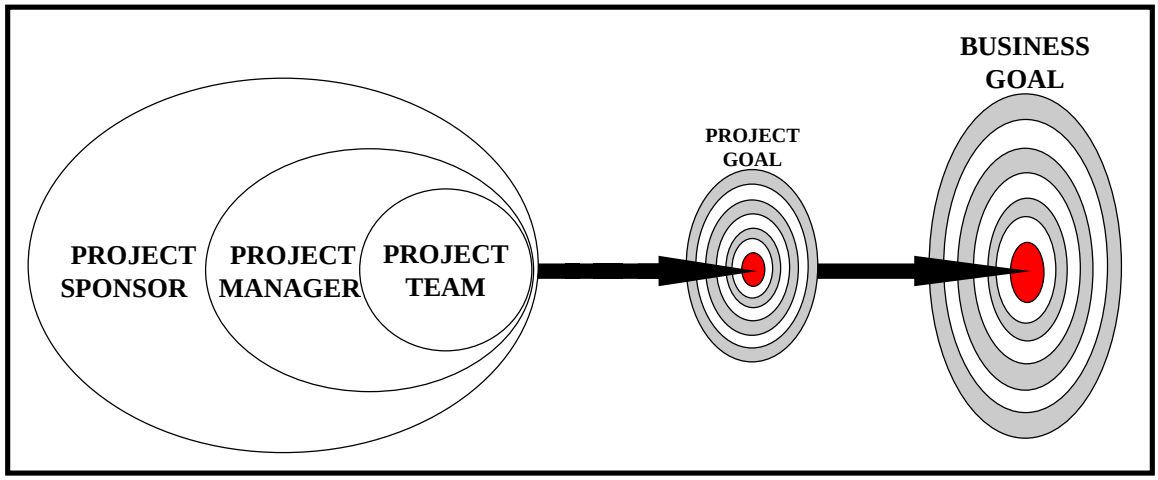
1. Project Team
   - There is NO substitute for the right people – leader, team members, and outside experts.
2. Solid Methodology
   - Solid methods for project management, business process improvement, and issues/details management are all critical.
3. Crucial Information
   - Lots of CRUCIAL information must be identified, collected, and managed.
4. Unified Toolset
   - Managing busy people, complex analysis and planning, and a myriad of details and crucial information, can't be done with Post-It notes and luck!

Business Case Assessment

The business case assessment is fundamental to answering the question, "Should we improve the existing system – and if so, where and how – or should we begin planning when to replace the system?"

The purpose of assessing requirements includes:

- Understanding Strategic Needs
- Identifying Critical Success Factors
- Defining Enterprise Change Requirements
- Pre-Planning Project Scope and Objectives



The process for the business case assessment must be done in a top down fashion.

The process has the following five steps:

1. Meet with the Senior Management team. The agenda is:
   - General briefing on the importance and complexity of system upgrades and replacements. (½ – 1 hour)
   - (Optional) Create a high-level business process flowchart. (1 – 2 hours)
   - Present and answer "Executive Questions" that establish a strategic mandate and constraints. (2 – 3 hours)
   - Generate report and review results showing alignment, or lack there of, between senior manager's strategic visions. (½ – 1 hour)
   - Resolve key differences, define company's critical success factors, and establish requirements weighting.
2. Meet with the Functional/Departmental Management team. The agenda is:
   - General briefing on the importance and complexity of system upgrades and replacements, and summarize senior management results. (1 – ½ hour)
   - Revise high-level business process flowchart and add transaction / information / data flow details identify workflow challenges. (2 – 6 hours)
   - Explain and distribute "Standard Requirements Questions" that must be completed according to deadline for next meeting. (½ – 1 hour)
3. Receive and process answers on Standard Requirements Questionnaires.

4. Distribute results and conduct Functional/Departmental interviews. The objectives are:
   - Identify specific features of the current "system" (both manual and electronic) which support the company's critical success factors.
   - Modify and/or amplify unclear responses to the Standard Requirements Questionnaires.
   - Identify new system requirements.
   - Identify the "owners" of issues / problems, tasks / actions, and requirement specifications.
   - Identify the "pain" (or emotional fire) that is driving the project!
5. Process results and distribute Standard Requirements Report.

The Standard Requirements Report should be divided by critical success factor, then by functional area / system module, then by importance weighting, then by current or future requirements, then by type of benefits derived – quantifiable or qualitative. So the hierarchy of the report is:

I. Critical Success Factor #1

1. Functional Area / System Module #1

1.1. Critical-weight Requirements

1.1.1. Requirement #1 (Current; Quantifiable Benefit)
- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Quantifiable Benefit Value (Detailed Calculation) Note: Typical quantifiable benefits include things like reduced engineering cost, yield loss, or payroll and benefits administration expense. Or like increased sales volume, inventory turn-over, or machine utilization.

1.1.2. Requirement #2 (Current; Qualitative Benefit)
- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Qualitative Benefit Value (Suggested Calculation; Probable Metrics) Note: Typical qualitative benefits include things like increased marketing agility and customer satisfaction, or reduced employee stress and increased company morale.

1.1.3. Requirement #3 (Future; Quantifiable Benefit)
- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Quantifiable Benefit Value (Detailed Calculation)

1.1.4. Requirement #4 (Future; Qualitative Benefit)
- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Qualitative Benefit Value (Suggested Calculation; Probable Metrics)

1.2. High-weight Requirements

1.2.1. Requirement #5 (Current; Quantifiable Benefit)

- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Quantifiable Benefit Value (Detailed Calculation)

1.2.2. Requirement #6 (Current; Qualitative Benefit)

- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Qualitative Benefit Value (Suggested Calculation; Probable Metrics)

1.2.3. Requirement #7 (Future; Quantifiable Benefit)

- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Quantifiable Benefit Value (Detailed Calculation)

1.2.4. Requirement #8 (Future; Qualitative Benefit)

- Description (Operational, Tactical or Strategic)
- Attainable (Yes, Yes with Modification, No)
- Confidence (High, Medium or Low)
- Qualitative Benefit Value (Suggested Calculation; Probable Metrics)

Sample Report

Product Demonstration Report
Monday, July 29, 2002
Package Type: ERP Product: Acme "Super-Easy" ERP

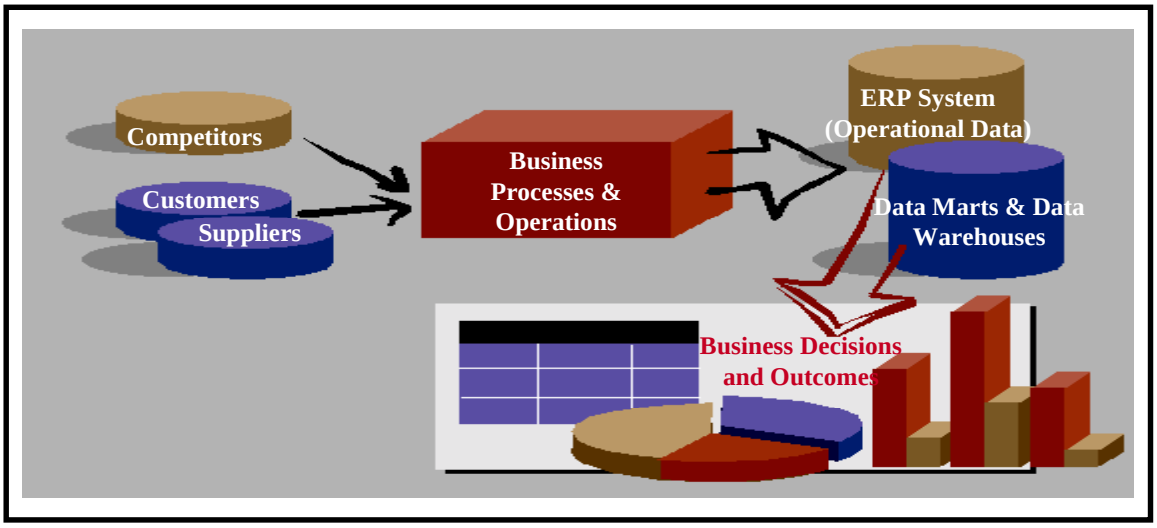
Module / Reqmt. #	Description	Weight (C/H/M/L)	Support (Y; Y-Custom;N)	Score (1 – 5)	Confidence (H/M/L)
BUDGETING					
4430	Budgeted amounts can be spread to months on a percentage basis.	Critical	Yes	3	Med
4440	The system provides a comparison of a budget to last year actual numbers.	High	Y-Custom	3	Low
Score	87.8%				
ESTIMATING & QUOTING					
1120	The user can create a estimate without having to first establish the item master, BOM, and routing.	Critical	Yes	3	Med

1130	The estimating system uses labor, machine, and burden rates that have already been established in the work center or cost files.	Critical	Y-Custom	2	Med
1160	One item on an estimate can be comprised of a number of independently estimated items.	High	Y-Custom	3	Med
1180	The estimating system enables users to establish a markup percent over cost to determine a sales price.	High	No	0	High
1200	The system has the capability to convert an estimate to a quote without having to re-key the data.	Med	Yes	4	Med
5110	The system allow DCMAO cost categories to be defined in the estimate.	Med	Y-Custom	2	Med
5120	The system allows “cut and paste” re-use of portions of prior estimates.	Med	Yes	3	Med
Score	72.6%				

Module 2 – Requirements Analysis

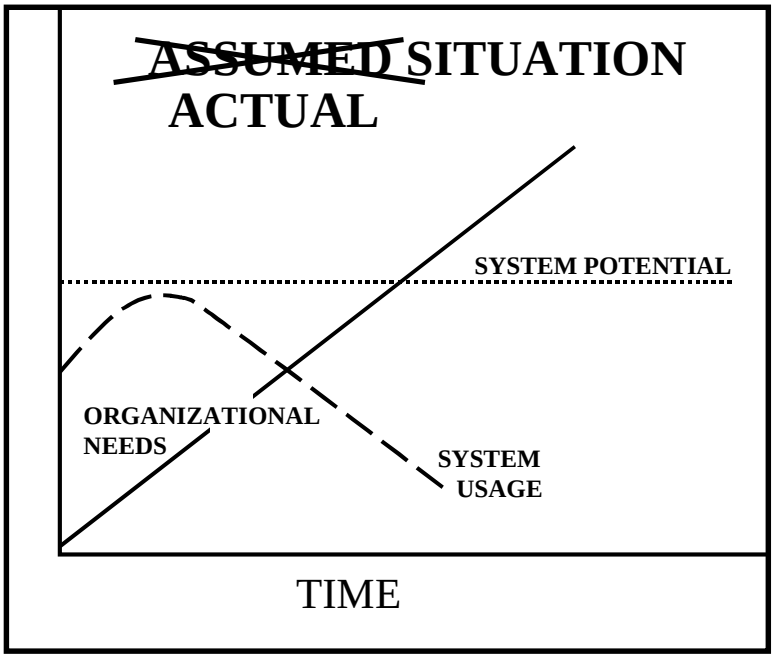
Business Information picture

Enterprise systems are part of a bigger business information picture than is often understood.



Budget/Benefit Report

The goal of analyzing requirements is a Budget/Benefit Report that compares the existing system with potential new systems. It compares the cost/benefit ratio of improving the existing system with that of a pseudo-system. The pseudo-system is defined by an industry-type, general suitability profile with cost being established by how often the average candidate system is sold into similar size and types of organizations.



The most important category of responses to analyze are the ones with critical or high-level weights and low confidence scores.

Always remember that renewed training on the existing system is far cheaper and less painful than replacing it. Unless organizational needs that the existing system cannot meet are demonstrated to have a critical or high-level weight, a system replacement should never be undertaken.

Once the Budget/Benefit Report has been prepared it should be presented, along with the recommendation the project team and any consultants involved.

Senior Management Review

Hold a Senior Management review meeting. The agenda is:

- Review Business Process Flowchart
- Review Requirements that were weighted as Critical or High-level
- Review the Budget/Benefit Report
- Outline the Improvement Process for the existing system
- Outline the Selection & Implementation Process for a new system
- Make a Go / No Go / Redirect decision on Improving or Replacing

Assuming a real need to replace the system has been identified and approved, we move to the Selection phase.

Module 3 – System Selection

Most Important Question

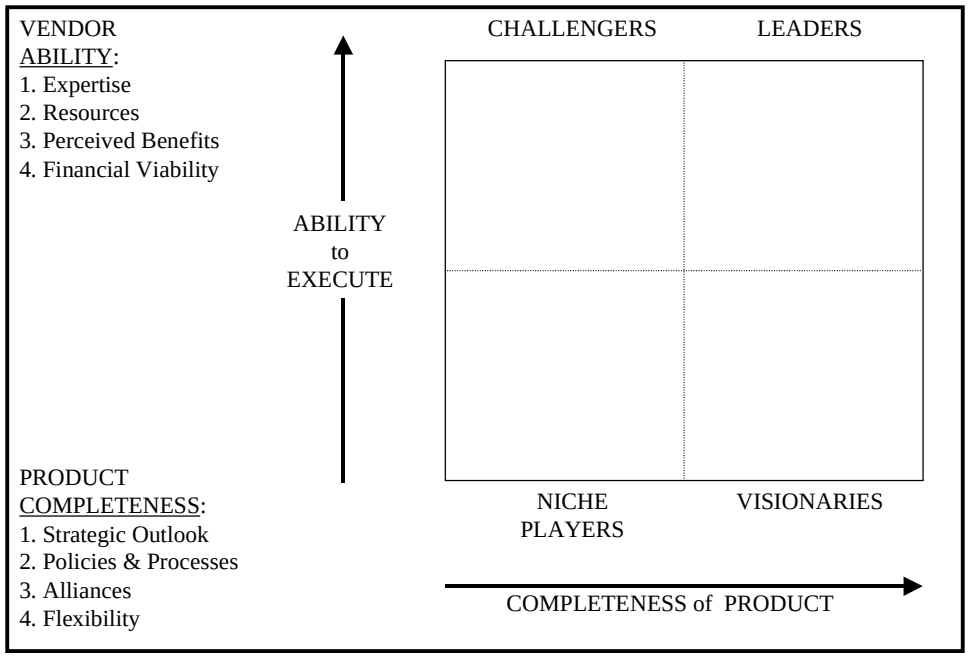
What is the correct answer to the single most important, and difficult, question of the project,

"WILL YOU SHAPE THE SYSTEM OR THE BUSINESS?"

The correct answer is **BOTH**, and it changes during the phases of the project. Pre-Selection focus on software changes. Post-Selection focus on business changes. With that truth in mind, it is important to understand the purpose of meaningful system demonstrations.

The purpose is to find the system that:

- Meets the most requirements in a current release, without customization.
- Is provided by a vendor with an acceptable corporate and financial profile.
- Can be implemented successfully!



Too often organizations don't understand this simple truth and they rush off (popcorn in hand) to be entertained by the vendor's sales demonstration team (who are a bunch of wizards, creating vaporware at the touch of a key board).

To be effective the system selection process has to include all of the following parts:

Part 1: Develop Options

1. Define "high-level" differentiators (usually the critical-weight requirements)
2. Create a long-list (usually 10 – 20 packages) of Candidate Software. Sources are:
   - Similar Companies – competitors and non-competitors
   - Internet-based Research Providers
   - Industry Forums and Research Providers – usually CD-type listings
   - Trade Publications – usually printed buyer's guides, lists or tables
3. Send RFI to Candidate Software vendors, VARs and consultants. Be sure to include request for financial statements.
4. Prepare phone "demo" (interview) questions and schedule 2 – 3 hours with representative.

5. Conduct phone demos to refine to a short-list (usually 2 – 4 packages; less is more! so don't exceed 4)

Part 2: Plan Demonstrations

6. Define Project Team; they will prepare, manage and evaluate demonstrations
7. Prepare Demonstration Packages; they include scripts, supporting data files, and vendor instructions
8. Distribute Demonstration Packages to vendors, schedule demos, and make logistical arrangements, as needed.
9. Prepare Participation Packages; they include invitee list, participation rules, sample Rating Sheet and demo schedule.
10. Prepare complete Rating Sheets.

Part 3: Conduct Demonstrations

11. Manage each Demonstration
12. Use scripts and document results and comments on Rating Sheets
13. Record and compile Rating Sheet results and comments after each demo.

Part 4: Evaluate Packages

14. Check references, user group status, and financial solvency
15. Evaluate ability of each package to meet critical and high-weighted requirements
16. Compare/contrast strengths and weaknesses of packages
17. Rank packages and prepare a recommendation

Part 5: Hold Senior Management Review. The agenda is:

18. Review how long-list was developed.
19. Review how short-list was refined.
20. Review the confidence-level for differentiators used. Critical or high-weighted differentiators with low confidence ratings are extremely important.
21. Review package rankings and recommendation
22. Make a Go / No Go / Redirect decision on Improving or Replacing

Part 6: (Meaningful) Contract Negotiations

23. State business requirements clearly, in writing, as represented in the demos.
24. Define the best possible (and agreed upon?) balance of responsibilities and expectations. Clearly state training expectations and metrics.
25. Document the metrics that define the system as implemented successfully!
26. Settle on price.

Contract Negotiations

Contract negotiations, to be meaningful, must be the outcome of a careful assessment and analysis of requirements, a thorough screening and selection process, and must integrate tightly with the system implementation plan. Many vendors try to avoid such negotiations because they want to enjoy the legal "protection" of the purposefully vague and one-sided "standard clauses" in their contract forms.

Caveat emptor – buyer beware – if you let them refuse to negotiate with you!

Module 4 – System Implementation

"If you think education is expensive…try ignorance!" Benjamin Franklin

The goal of system implementation is to find mis-matches between the business processes and the software processes as early as possible. The benefits of finding the mis-matches include:

- Reduced implementation time and cost
- Better managed user expectations
- Optimized customizations or work-arounds
- Identified procedural changes and key training needs

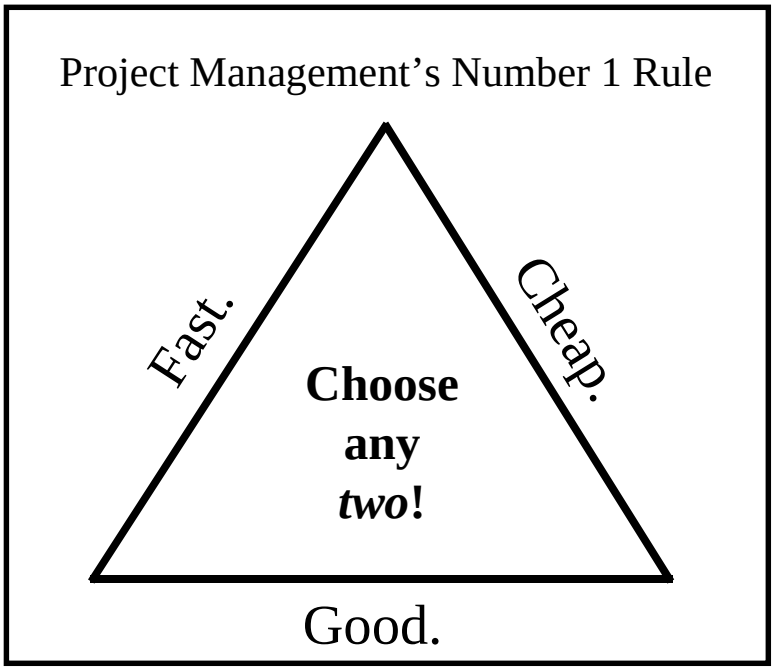
Project Leader Qualifications

The Project Leader must have expert knowledge of:

- Business Processes
- Organizational Politics and People Issues (and be able to "manage" them)
- Technical Project Management
- Vendor Relationship Management

Project Management

Documenting a project plan is an important part of establishing the foundation for successful execution of the implementation It should explicitly define customer objectives, major assumptions and be a forum for communicating decisions. It should describe the roles and responsibilities of the various stakeholders. It should be written in a way that provides a high-level review for Senior Management, as well as a detailed account of progress towards, or completion of, deliverables and milestones for the PM and Team Members. Finally, it should demonstrate that all aspects of the project have received appropriate thought and that clearly defined plans for project execution and control have been formulated.



Roles and Responsibilities:

1. A Customer balances project objectives with cost and time constraints by limiting features or increasing cost and time, and accepts deliverables and milestones.

2. A Sponsor provides resources & removes obstacles or resets priorities with the customer. On internal projects, the customer and the sponsor may be one person.

3. A Project Manager plans the project work within constraints, and manages the team members' efforts.

4. A Team Member executes required project work – either directly or indirectly, and reports the work effort status.

5. Other Stakeholders have an interest in the outcome of the project and are not one of the other types of stakeholders.

Defining Tasks

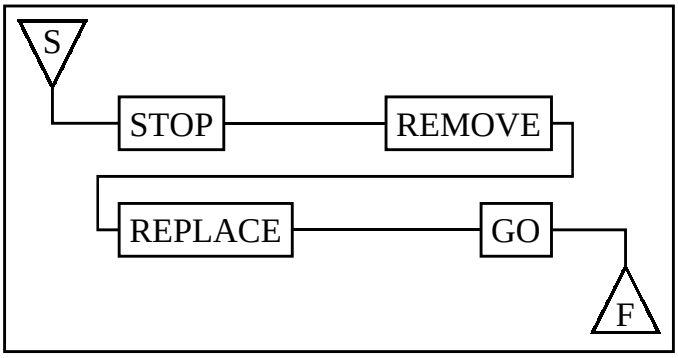
For planning to be effective it must identify – clearly and concretely – what is required as input for any activity and what is expected as output. Control comes from being able to measure those inputs and outputs, and adjust for any variances. Therefore, the Work Breakdown Structure (WBS) and its elements are of fundamental importance. The WBS must define deliverables which can be measured and reported – ultimately – with a yes, delivered as expected, or no, not delivered as expected. The importance of selecting elements which are a natural part of the implementation, and which are readily reportable cannot be overemphasized.

However, it requires significant discipline to develop a WBS focused on 'deliverables' containing project elements that are measurable and reportable. Investing the time and discipline to develop a deliverables-focused WBS provides many benefits to the project and its manager, the most important of which is the ability to actually manage and control the work performance so it meets the objectives.

Forecasting the Schedule

When we speak of project scheduling we are usually referring to two disciplines or tools. The first discipline is the Logic Network. The second discipline is the Critical Path Method for analyzing the logic network. These two disciplines provide insight into areas that are often vague and have a high probability of becoming problems without effective management. That insight can then be used to focus appropriate resources to keep the project on schedule and free from obstacles.

The development of a logic network requires that dependencies between work packages or activities be accurately and completely identified. Those dependencies show what activities and events impact the start of an activity, and also what subsequent activities and events are affected by the completion of the activity. Considering the need to change a flat tire provides a simple example.



The diagram indicates a start point, usually by a triangle identified with an "S", followed by the activities: (1) stop the vehicle, (2) remove the flat tire, (3) replace it with a spare tire, and (4) return the vehicle to a state of traveling forward. The diagram indicates the process is finished with a triangle identified by the letter "F".

When a logic network is created for a project there are usually activities happening simultaneously in several different facets of the project. For example, there may be activities producing the actual deliverables, there may be activities producing supporting documentation, and there may be activities assuring the quality of the other two facets. These different activities often occur on separate parallel "paths" of the logic network. In addition, cross-functional dependencies create a potentially intricate web of paths.

The Critical path Method (CPM) of schedule analysis helps us ascertain two vital pieces of knowledge and communicate them to other stakeholders. First, which activities, if allowed to slip, will cause a directly related slip in the completion date of the project. Second, which activities can directly improve the total performance of the project.

In CPM the term "critical path" refers only to time. It neither measures nor implies the importance of any activity. Both important and mundane activities can be on the critical path. What is important is that the critical path is where the duration of the activities, because of their dependencies, will take the longest to complete. By definition then, the critical path defines the shortest possible time for project completion. Therefore, any slip in completing any activity on that path directly impacts the project completion date. The start and duration of every activity on the critical path is time critical, regardless of whether the activity itself is of high importance or mundane.

To manage an implementation project, and have even a prayer of a chance of delivering it on schedule, the project leader must be well-versed in the creation of logic networks and the application of CPM.

About the Course Leader:

John Stenbeck is the founder and President of Pareto Principals, Inc., a San Diego based organization that provides expert consulting and training...with an eye on the future! As an internationally published author, business management consultant, and corporate trainer, Mr. Stenbeck has devoted over 25 years to improving the performance of client organizations. He has been instrumental in helping them develop well-grounded, business and information-technology visions that deliver the ability to outflank competitors, deeply penetrate new and existing markets, and set and achieve strategic goals.

He is a member of the faculties of the University of Phoenix and the American Management Association.

A partial list of John's clients includes Visa – Smart Cards, Simplex Solutions, Oracle Corp., Guinness Bass UDV, Lucent Technologies, U.S. Marine Repair, American Gypsum, Eldon, Interex, and Comdex.

His clients look to him for measurable, practical, performance-enhancing solutions to meet real needs.

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