

Table 2.1 Summary of Factor Rankings for Successful Projects

| Rank | Factor | % |
|-------------|--------------------------------|------------|
| 1 | User Involvement | 17 |
| 2 | Executive Management Support | 15 |
| 3 | Experienced Project Management | 14 |
| 4 | Clean Business Objectives | 14 |
| 5 | Minimized Scope | 12 |
| 6 | Agile Requirement Process | 7 |
| 7 | Standard Infrastructure | 6 |
| 8 | Formal Methodology | 5 |
| 9 | Reliable Estimates | 5 |
| 10 | Skilled Staff | 5 |
| | Total | 100 |

Source: Adapted from the Standish Group, 2003

Table 2.2 Part 1 - Key Lessons Learned

| # | Project Guidelines | Lessons Learned |
|---|---|---|
| 1 | A project runs best when employee morale is high. | Positive employee morale will add great value and effectiveness to your project. |
| 2 | It's important that the project team and business units understand the "big picture" of the project. | Involved or affected people need to know the "big picture" (goals, objectives, master schedule, system architecture, and major milestones) of your project. |
| 3 | Project Plan. | Team members need to know that a project plan is their "friend" because it defines what their role is in building/delivering the system. |
| 4 | Work Breakdown Schedule (WBS). | A project plan must be developed from the scope with input from the participants. |
| 5 | First build a schedule-constrained plan, and then transition to a resource-constrained plan. | Your project schedule needs to reflect the impact (i.e., changing scheduled durations) of staffing on each activity. |
| 6 | Wherever possible, tasks for testing should be included for any task in the plan for which feasibility is questionable. | If you don't have extra testing tasks for related "risky" tasks (doing something that has not been done before), you raise the probability of going over schedule or failure. |

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| 7 | Project buffers. | Be sure that project risks are fully understood and correctly quantified. Add sufficient contingency in time and cost to cover the project risks should they turn into issues. |
| 8 | Major milestones. | You need to be able to present a one-page high-level overview and current status of your project to your team and management. |
| 9 | Critical path activities in a project plan should be identified. | Your project team needs to know the sequence of activities, which has the least amount of flexibility (float) in your schedule. |
| 10 | Maintain a current view of the plan. | Always run a baseline to preserve your original approved dates to show project history of revision dates, which will reflect how the project schedule is going. |
| 11 | Project Control Book. | You need a Project Control Book (could be on-line) so anyone can go to one place to find all the various documents that relate to your project and for historical reasons. |
| 12 | Work plan discipline. | Team members that are not working activities from the approved plan don't have any project discipline. Project discipline is the "glue" that holds it all together! |
| 13 | Updating project plan. | Overdue tasks should elicit immediate response from management to solve the problem. It's a choice |

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| | | between being proactive or reactive. |
| 14 | Variance analysis. | You need to have weekly project status meetings to put recovery plans in place to eliminate potential problems. |
| 15 | Status Dashboard. | A one-page weekly project-tracking “Dashboard” is a fast way to send an overall project status message to management and the entire team. |

Table 2.3 Part 2 - Key Lessons Learned

| # | Project Guidelines | Lessons Learned |
|----|---|---|
| 16 | Sponsor involvement. | If you don't have full backing of the project Sponsor, the odds of project implementation success and actual system usage are dismal. |
| 17 | Technology maturity. | The education and rework time needed to make the change to new technology must to be factored into the project plan. |
| 18 | Communications is crucial. | The timing, content and distribution of your Communications Plan are key to building rapport within the development teams and business units. |
| 19 | In a matrix organization, people have to work harder on their inter-relationships. | In matrix organization, people need to work harder to build team rapport and to accomplish goals. |
| 20 | Employee productivity is at its highest when employees know what to do, how to do it, and do it! | Productivity is at its best when project processes are defined and project members are educated about their roles. |
| 21 | Plan resources accordingly. People can't do regular support work, be involved in the planning and the execution of a project. | You don't want to have too great of a dependency on a small number of key resources. |

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| 22 | Requirements definition. | If you don't have the real requirements, how can you come up with a solution? |
| 23 | Actions speak louder than your words. | The biggest factor that can make or break a project is the degree of discipline that the Project Manager (PM) exercises. |
| 24 | Actual data collection process. | You need charge codes to keep track of your project hours and costs to "gauge" how your project is doing and for historical purposes. |
| 25 | Unrealistic deadlines. | If you can't stand up to unrealistic deadlines, you need to find a new job. |
| 26 | Tracking issues. | Whenever possible, Issues should be converted to tasks in the project plan. |
| 27 | Don't delay bringing in expert/mentor resources to the team as soon as there are Issues that can't be resolved by the core team. | If you have a need for expert/mentor resources, get them ASAP to save your project. |
| 28 | Change Control. | A change control process will assure only needed changes are approved and made. |
| 29 | A software development process must be examined routinely for improvement. | Lessons learned from past usage should be adopted to improve your development process. |
| 30 | Lessons learned (LL). | LL from past projects are essential for a software development shop to become and remain competitive. |

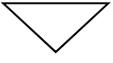
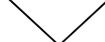
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|--|------------------|---------------------------------------|
|  | <i>Operation</i> | When something is changed or created |
|  | Transportation | When something is moved |
|  | Inspection | When something is verified or checked |
|  | Delay | When something waits |
|  | Storage | When something is kept |

Figure 2.1 Process Chart Symbols

| Steps of Present (or Proposed) System | <i>Operation</i> | <i>Transportation</i> | <i>Inspection</i> | <i>Delay</i> | <i>Storage</i> | <i>Notes</i> |
|---------------------------------------|---|---|--|---|---|--------------|
| 1. Sales person creates bill |  |  |  |  |  | |
| 2. Sales person places in Out Basket |  |  |  |  |  | |
| 3. Taken to Finance |  |  |  |  |  | |
| 4. Placed in In basket |  |  |  |  |  | |
| 5. Accountant places in Pending File |  |  |  |  |  | |

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| Number of Steps/Action | 1 | 1 | 0 | 2 | 1 | |
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Figure 2.2 Sample Situation: Minimal Bill Process Chart

Table 2.4 Age/Sex Decision Logic Table

| | 1 | 2 | 3 | 4 |
|----------------------------|----------|----------|----------|----------|
| <i>Person 65 or older?</i> | <i>Y</i> | <i>Y</i> | N | N |
| Person male? | Y | N | Y | N |
| Tally senior males | <i>X</i> | | | |
| Tally senior females | | X | | |
| Tally younger males | | | X | |
| Tally younger females | | | | X |

Table 2.5 Help Desk RACI Chart

| Roles | Client | Help Desk | Local Support Staff |
|---|---------------|------------------|----------------------------|
| Activities (PC Problem Resolution) | | | |
| Calls Centralized Help Desk in Dallas | A | | |
| Help Desk Opens Resolution | | R | |
| Help Desk Resolves Problem | C | R | |
| Help Desk Closes Resolution | | R | |
| Help Desk Assigns Resolution to Location | | A | I |
| Location Resolves Problem | C | | R |
| Location Closes Resolution | | | R |

Table 2.6 Project Ranking Matrix

| | Project A | Project B | Project C | Project D | Row Sum | Ranking |
|------------------|-----------|-----------|-----------|-----------|---------|---------|
| Project A | ----- | 1 | 1 | 0 | 2 | 2 |
| Project B | 0 | ----- | 0 | 0 | 0 | 4 |
| Project C | 0 | 1 | ----- | 0 | 1 | 3 |
| Project D | 1 | 1 | 1 | ----- | 3 | 1 |

Table 2.7 Weighted Project Ranking Matrixes

| | Criteria | Weight % | Project Request | | Funded Projects | |
|-----------------------------|--|----------|-----------------|-------------|-----------------|-------------|
| | | | Criteria Rating | Weighted | | |
| | | Total = | 1 = Low | Weight % | Weighted Scores | |
| | | 100% | 5 = High | X Rating | Project A | Project Z |
| 1 | Supports company's strategy, mission & goals | 25% | 3 | .75 | 1.25 | 1.00 |
| 2 | Potential to increase revenue | 20% | 2 | .40 | .80 | .60 |
| 3 | Likelihood of success | 20% | 4 | .80 | .80 | .80 |
| 4 | Readiness, in terms of skill sets, geographic and linguistic differences among team members, and availability of HW and SW | 15% | 3 | .45 | .75 | .45 |
| 5 | Level of urgency, e.g., competitive advantage or legal requirements | 10% | 2 | .20 | .50 | .30 |
| 6 | Potential to decrease costs | 10% | 3 | .30 | .30 | .20 |
| Weighted Total Score | | | | 2.90 | 4.40 | 3.35 |

Table 2.8 Project XYZ Mini-Review

| Date of Review | | 2/22/12 | |
|--------------------|---|--|--|
| % Complete of Plan | | 67% | |
| Reviewers | | Julie Smith | |
| Seq | Metric | <u>Rating</u> 0 = Good 5 = Poor | Comments |
| 1 | Critical Path (longest sequence of tasks and controls the finish date) | 5 | There are a number of “level of effort” tasks (i.e., handle issues, attend meetings, monitor project, and etc.) that are on the Critical Path and there is an average of one-week delay. |
| 2 | Deliverables by Phase | 0 | The Solution Outline is scheduled to complete within two days of original completion date. |
| 3 | Late Milestones (zero duration that achieves a deliverable or key point in the project) | 5 | There are two late milestones – assist in Sketching Release Plan 2/7 & Approve Success Criteria 2/8 |
| 4 | Hours in Plan vs. Financial Tool | 0 | The actual hours match exactly and the remaining hours are within 10 hours of each other. |

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| 5 | Resource Changes | 0 | Resource over allocations continues, but has minor impact on the project at this point in time. |
| 6 | Workflow/Reasonability | 0 | The project plan is logical. |
| 7 | Earned Value (a measure of completed/partially completed work units up to a status point) | 0 | The earned value is on target. |
| 8 | Client Processes in Plan | 0 | The issue of completing client Questionnaires on time remains open. Project Mgr. is following-up. |
| 9 | Risk Plan Up-to-date and Issues Unresolved | 0 | 3 of the 24 Issues remain open and need to be resolved soon. |
| 10 | Impact of Approved Changes to Plan | 0 | 2 Project Change Requests (PCRs) are awaiting client signature and if approved, the plan (schedule and/or cost) will need to be updated. |
| | Total | 10 | Rating: 1 –19 = Green 20-39 = Yellow 40 or higher = Red |

Table 2.9 Ten Questions for Outsourcing Success

| No. | Success Questions |
|-----|--|
| 1 | Do we have a methodology for evaluating the business case for outsourcing? Identify your strategic reasons (improving business focus, gaining access to capabilities you don't have) and tactical reasons like reducing operating costs and making capital funds available. |
| 2 | Have we identified the hidden costs? Hidden costs could include understanding the price of hardware, software or the length of the project, losing key resources and scope creep. |
| 3 | Do we have other projects or events that will hinder the outsourcing project? Overlap might include duplicating efforts with other departments, unknown dependent activities and working on tasks out of sequence. |
| 4 | Will our stakeholders and project sponsor be committed? If the stakeholders and/or sponsor are not committed, your project's progress will be hindered and your chances of success will decrease. |
| 5 | What are our conditions of satisfaction (COS)? Define your COS: Ensure your expectations are met or exceeded and knowledge transfer will be completed successfully before your project starts. Make sure the outsourcer understands the expectations. |
| 6 | How will we manage our relationship with the outsourcer? At the start of the project, the outsourcer must develop a communication plan that has to be approved by you. The plan should include how stakeholders will be kept informed on a consistent and timely basis. |

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| 7 | <p>What are our responsibilities before the outsourcing project begins? A good outsourcer will have responsibilities – the facilities you’re expected to provide, for example – outlined in the final agreement. Remember that the outsourcer’s performance depends on you following through on your responsibilities.</p> |
| 8 | <p>How do we meet our responsibilities once the outsourcing project begins? The degree of discipline your leadership exercises can determine project success. You must have discipline to meet schedule commitments, like equipment and available people to be successful.</p> |
| 9 | <p>Can we free up internal resources to work on the outsourcing project? Your resource considerations should include matching skills to what is needed, staffing ramp-up/roll-off, training time and learning curve, holidays, vacations and part-time resources.</p> |
| 10 | <p>Have we selected an outsourcer that understands our business? You must spend the time and energy to select the best outsourcer. You will have to live with the decision during and after the project. Always get two or three bids and consult your legal representatives.</p> |

Table 2.10 MS Project add-ins

| Name | Comments |
|-------------------|---|
| WBS Chart Pro | <p>Down load a demo version from www.criticaltools.com</p> <p>Uses a tree-style diagram known as Work Breakdown Structure (WBS) to plan/display projects.</p> |
| PERT Chart EXPERT | <p>Down load a demo version from www.criticaltools.com</p> <p>Uses PERT charts (also known as network charts or precedence diagrams) to show project tasks and their dependencies.</p> |
| @Risk | <p>Download a demo version from www.palisade.com</p> <p>Uses Monte Carlo simulation to show possible outcomes of projects and how likely they are likely to occur.</p> |
| RISKPLUS | <p>Check out for enterprise-wide approach at www.riskplus.com</p> <p>Enables the identification and capture of risks and opportunities at all levels of an organization.</p> |