

FIGURE P.1 EASI Trend Chart

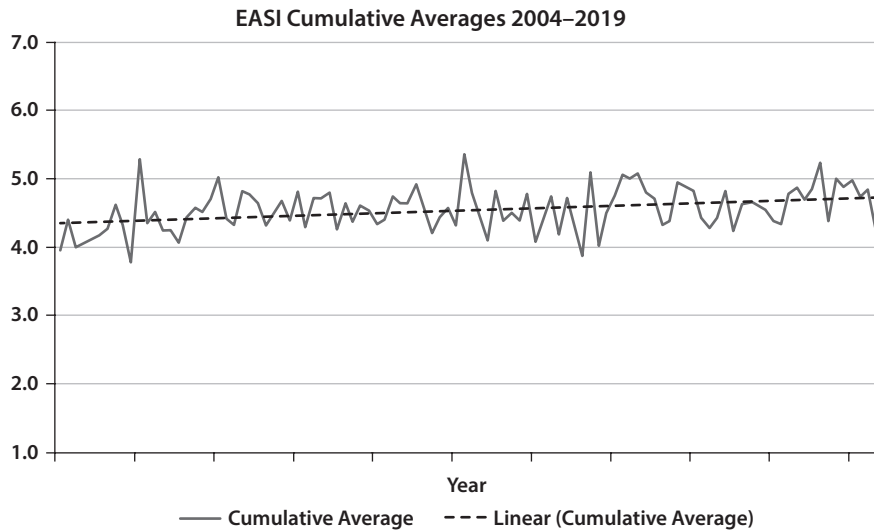


FIGURE 1.1 The Components of an Environment for Successful Projects

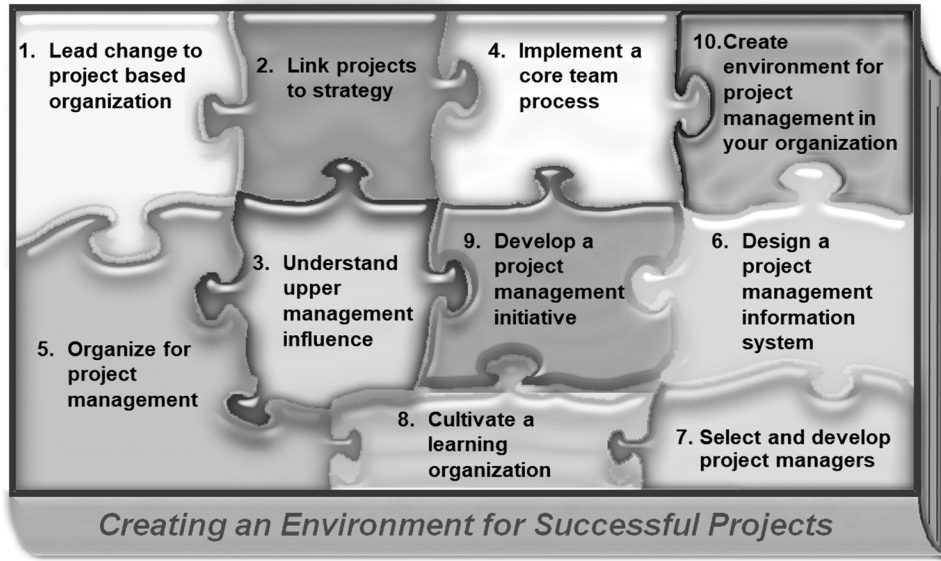


FIGURE 1.2 Matrix Organization

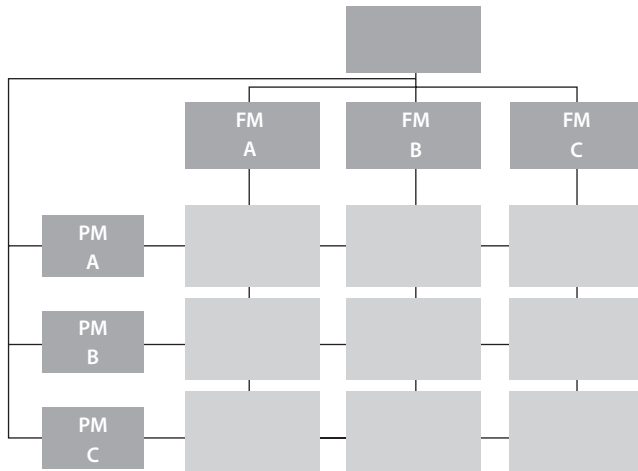


FIGURE 1.3 Caught in a Web

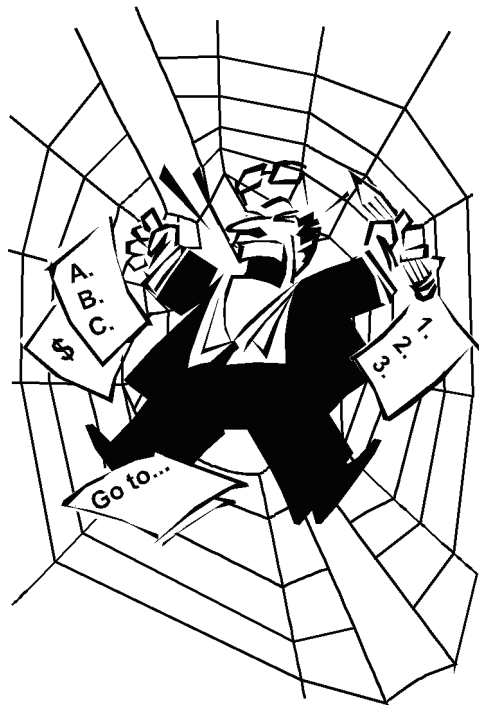


FIGURE 1.4 Organic Organization: An Internal Market-Based Approach to Projects

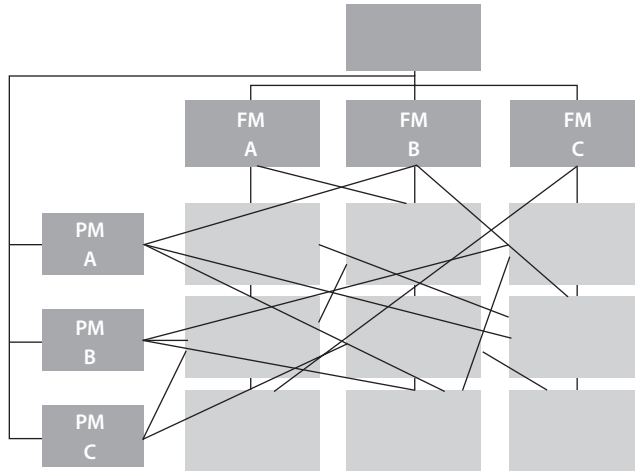


FIGURE 1.5 Stages of the Revitalization Model

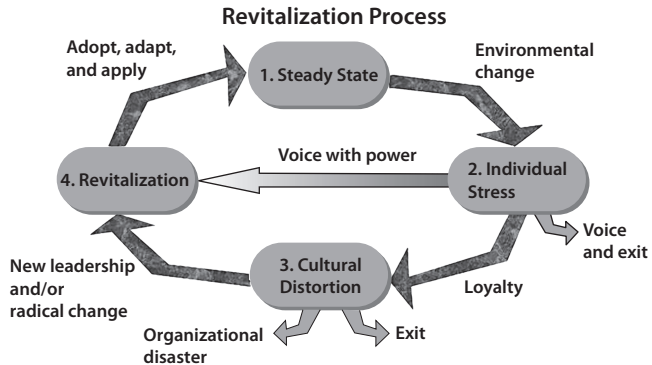


FIGURE 2.1 Projects without Strategic Emphasis

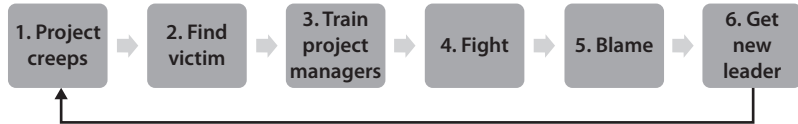
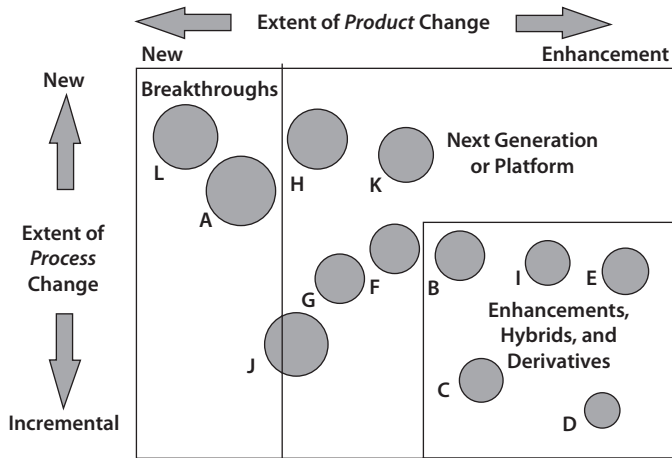


FIGURE 2.2 An Approach to Selecting Projects

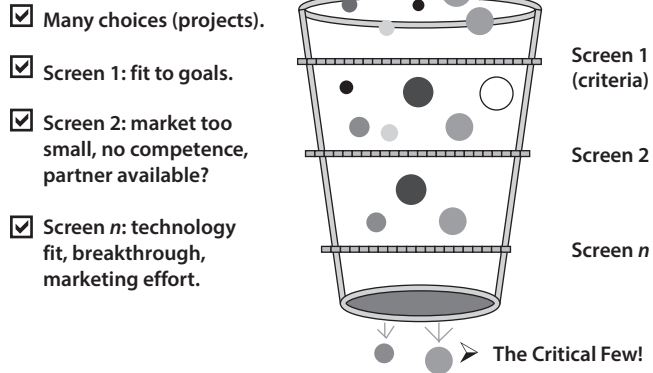


FIGURE 2.3 Sequence of New Product Introductions



Source: Adapted from Benton (1995).

FIGURE 2.4 Funnel for Screening Choices



Note: Bubble size corresponds to project size.

FIGURE 2.5 Increased Waiting Time as Utilization Increases

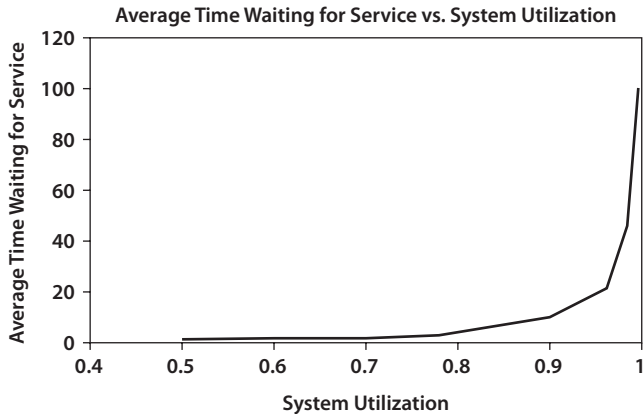


FIGURE 3.2 Bias Toward Action Before Planning



TABLE 3.1 Comparing Markets and Technology.

	Old Market Customers Known	New Market Customers Unknown
New Technology	Work with known customers to develop application	Work with unknown customers to develop application
	Failure rate high, payoff high (IBM 360)	Failure rate very high, payoff strategic (Xerox)
Old Technology	Show new application to old customers	New application in new market
	Failure rate low	Failure rate medium
	Payoff low	Payoff medium to high

FIGURE 3.3 Relationships between Time and Completion

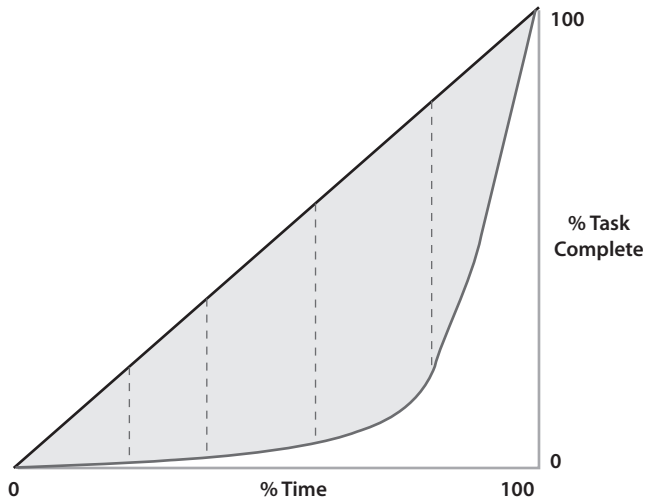


FIGURE 3.4 Out of Hand Cream



FIGURE 3.5 Matrix of Perceived Rewards

		Activity	
		Late	Not Late
Action		+	++
No Action		-	0

FIGURE 3.6 “HERO” A



FIGURE 3.7 “HERO” B



FIGURE 4.1 The Over-the-Wall Problem

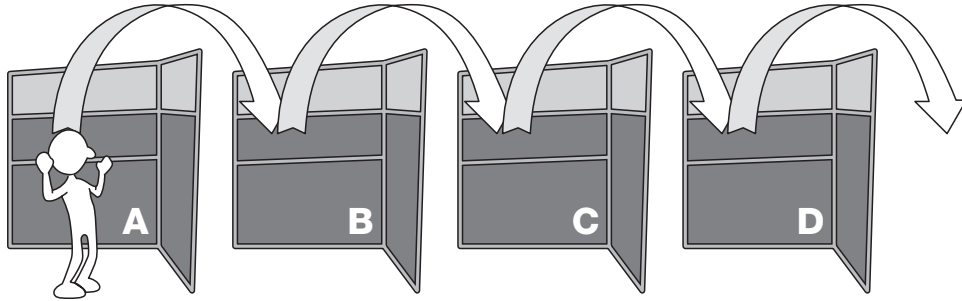


FIGURE 4.2 Core Teams Save Time

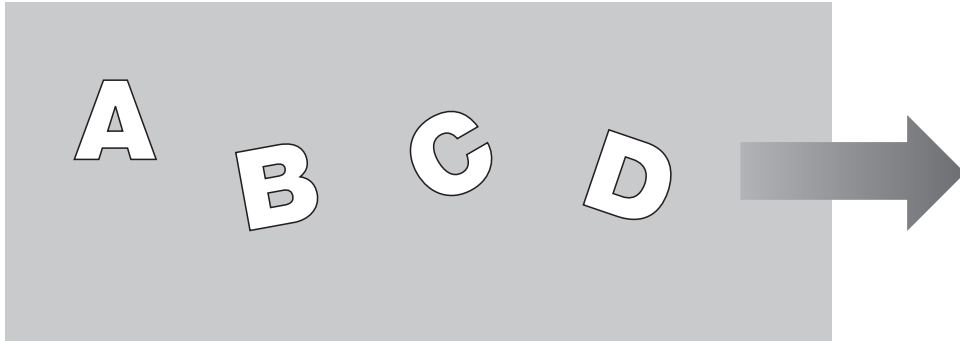


FIGURE 4.3 Product Life Cycle

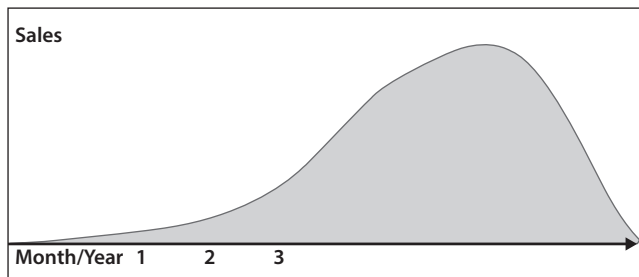


FIGURE 4.4 Concept Life Cycle

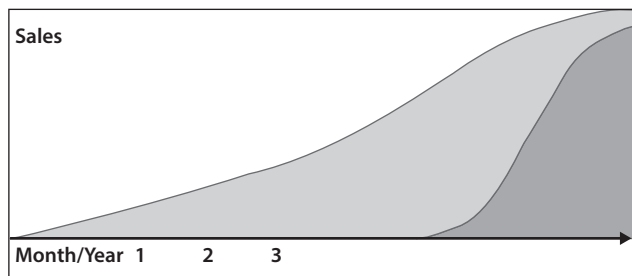


FIGURE 4.5 Core Team Members Are Not Interchangeable



TABLE 4.1 Net Present Value of Three Choices

	Choice A: Use an Outside Firm and Be on Time	Choice B: Use Team and Be One Month Late	Choice C: No New Feature and Be on Time
Project costs	\$3,500,000	\$3,250,000	\$3,000,000
Duration	12 months	13 months	12 months
Product costs	\$245	\$240	\$240
Market share	30%	26%	27%
Net cash flow with capital charge	\$2,343,157	\$2,079,146	\$2,617,094
Net present value	\$1,383,715	\$1,226,186	\$1,563,574

FIGURE 5.1 A Functional Organization

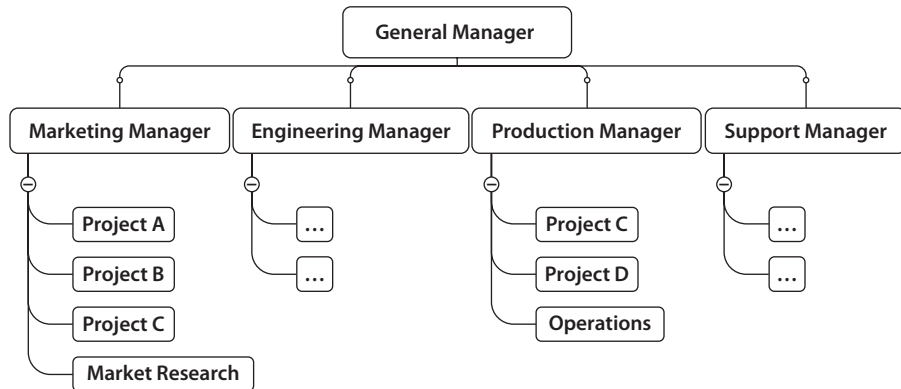


FIGURE 5.2 Avoid Functional Silos



FIGURE 5.3 A Fully Projectized Organization

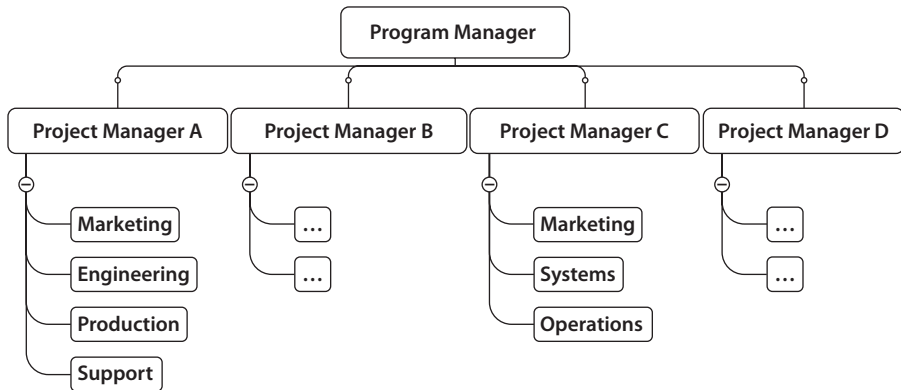


FIGURE 5.4 A Matrix Organization Structure

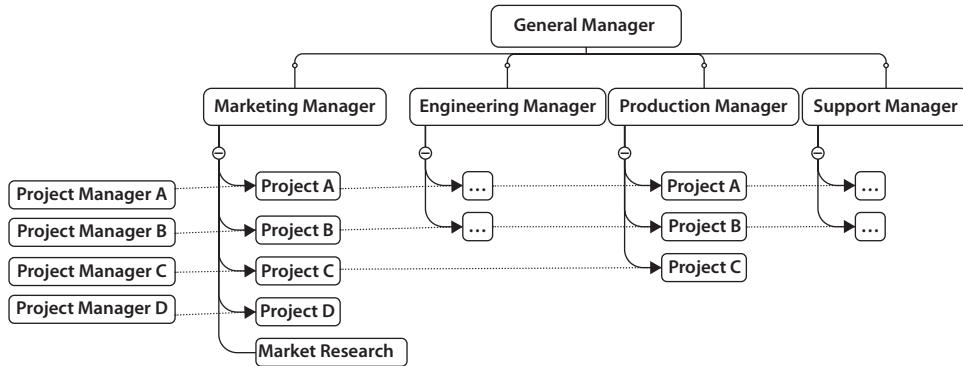


FIGURE 5.5 A Strong Matrix Organization

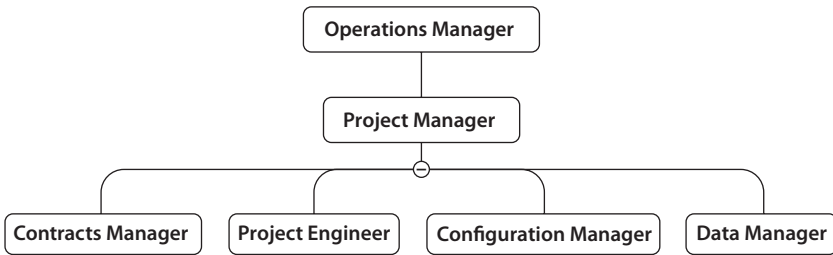


FIGURE 5.6 A Matrix Diamond Structure

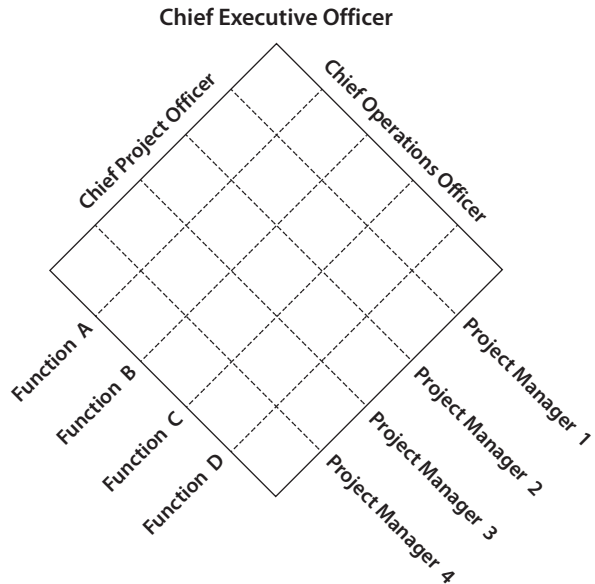
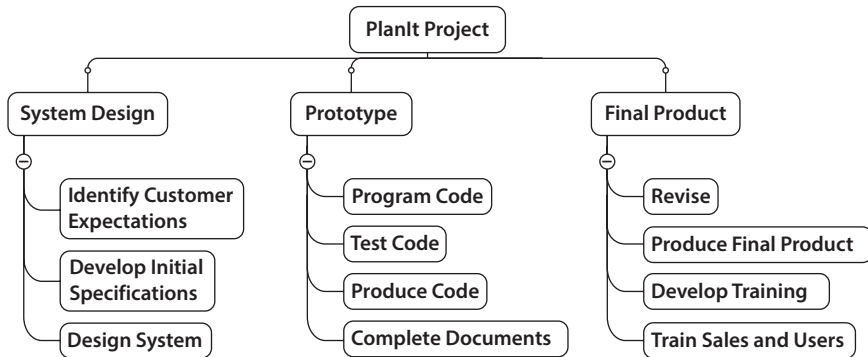


TABLE 5.1 Major Differences Between Project and Process

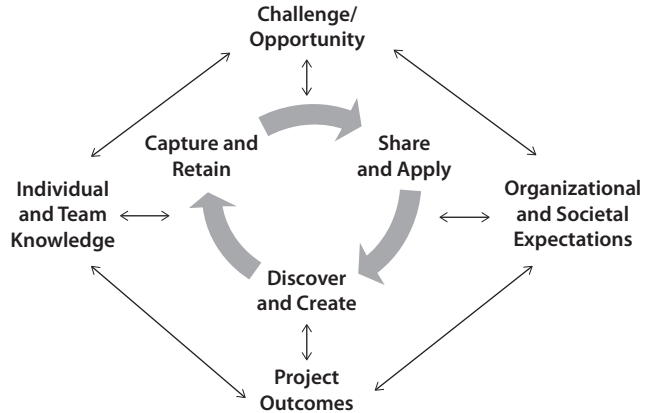
Factor	Project	Process	Difference
Number of products	One	Many	Cost orientation much lower on projects
Certainty	Low	High	Attracts different personalities
Metrics	Few	Many	High ambiguity on projects
Reward	Project completion	Organizational	Project managers more independent of the organization
Procedures	Fewer	Many	More individual determination of action on projects
Team members	Multidiscipline	Unidiscipline	Higher communication need
Customer orientation	Make them what they want to buy	Sell them what we make	Customer as king
Individual expertise	Wider	Narrower	Project managers need not be technical experts
Creativity	Higher	Lower	The creative process looks chaotic to a process engineer
Attention to detail	Lower	Very high	Individual focus on completely different aspects of producing a product

FIGURE 6.1 Sample of a Work Breakdown Structure



					Month 1			Month 2			Month 3			Month 4			Month 5			Month 6			Month 7			Month 8			Month 9														
	Strategic Category	Project	Priority	HeadCt	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
1	Sustain Business (Mix = 50%)																																										
2	In Plan	Proj F	1	2																																							
3		Proj G	2	2																																							
4		Proj H	3	4																																							
5		Proj J	4	6																																							
6		Proj K	5	2																																							
7		Proj M	6	2																																							
8		Proj N	7	3																																							
9	Out Plan	Next Step																																									
10																																											
11	New Business (Mix = 30%)																																										
12	In Plan	Proj B	1	2																																							
13		Proj C	2	1																																							
14		Proj D	3	1																																							
15		Proj E	4	4																																							
16		Proj I	5	1																																							
17	Out Plan	Fat City																																									
18																																											
19	Must Do (Mix = 20%)																																										
20	In Plan	Proj A	1	4																																							
21		Proj L	2	5																																							
22		Blue Sky																																									
23	Out Plan	CornerOfc																																									

FIGURE 6.3 REAL Knowledge Flow



Source: Hoffman and Boyle, 2015.

FIGURE 6.4 A Vectored Approach to Progress

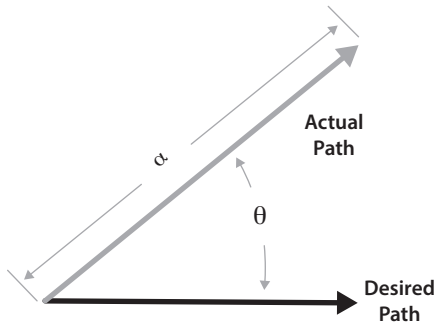


FIGURE 7.1 PMI Talent Triangle®

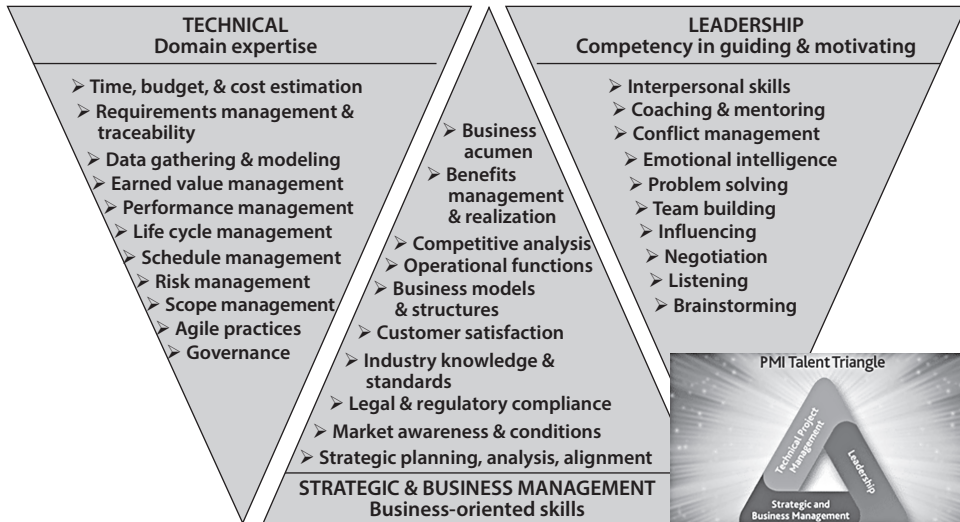


FIGURE 7.2 The Progression Path of Development as a Project Manager

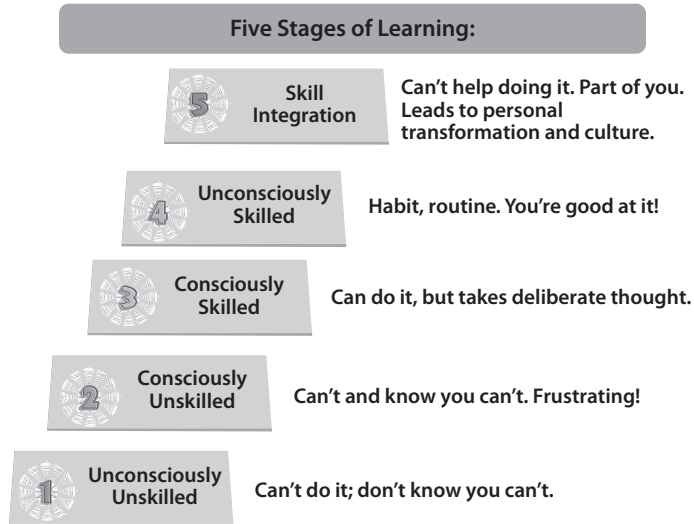


FIGURE 8.1 Openness in Organizations: An Example of Closed Loop Analysis

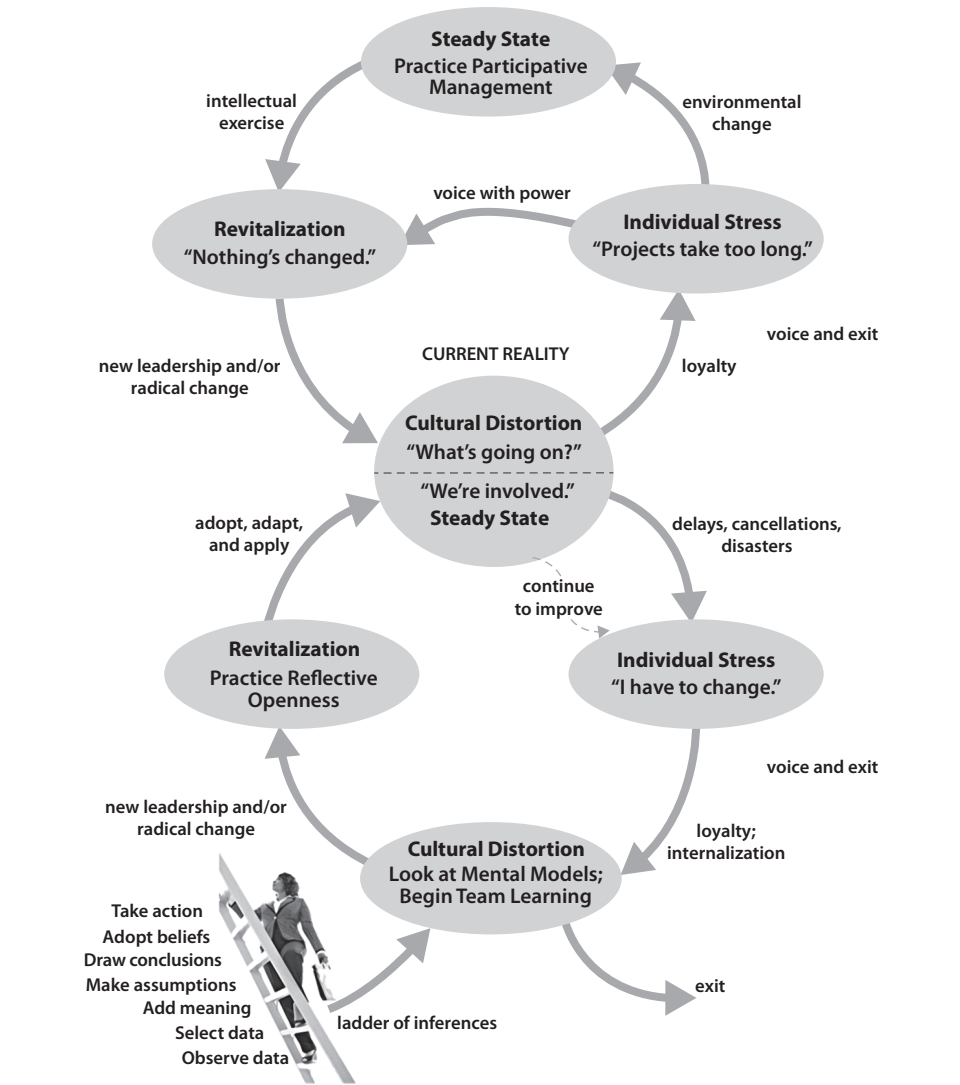


FIGURE 8.2 Cycle of Knowledge Creation

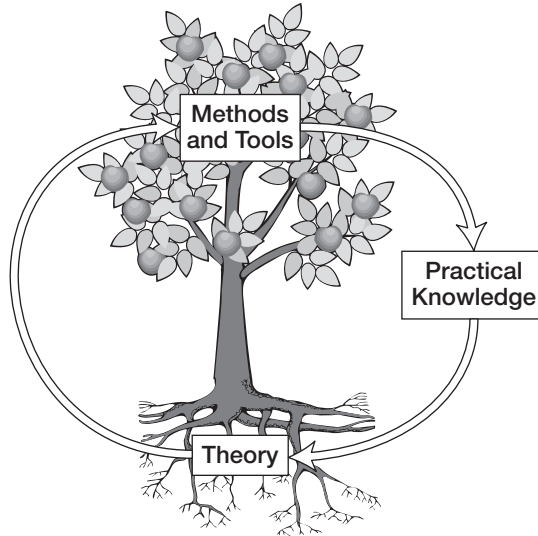


FIGURE 9.1 The HP Product Processes Organization

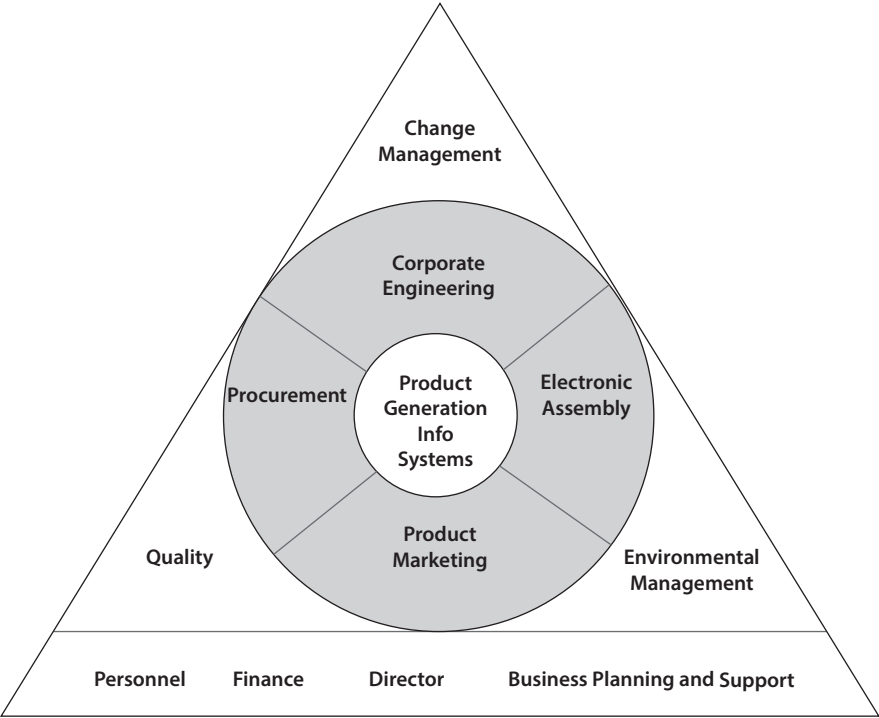


FIGURE 9.2 The Project Management Initiative at HP and Its Components

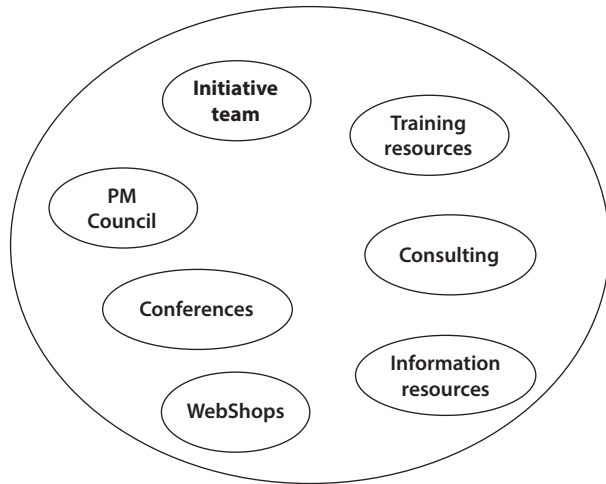


FIGURE 10.1 A Process for Success and Defaults for Nonaction

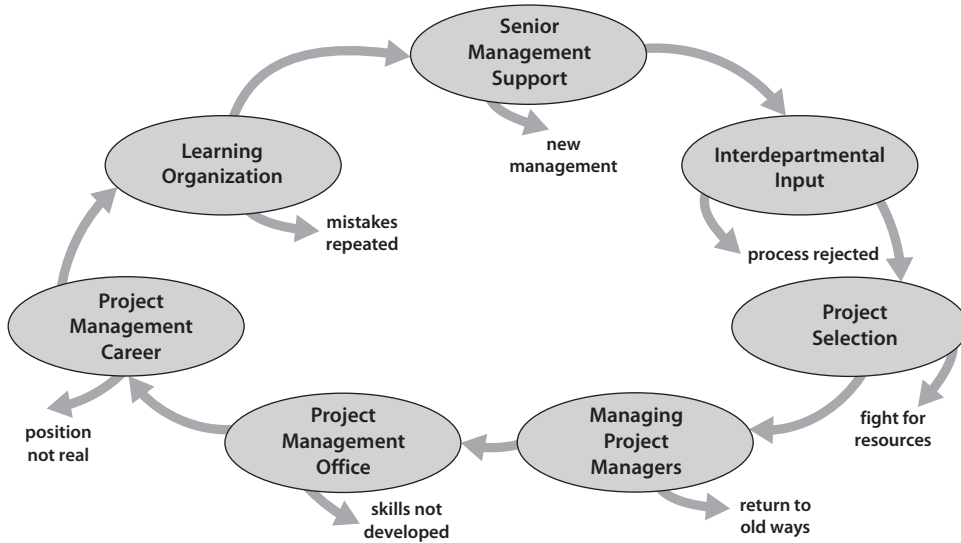


FIGURE 10.2 Using a Metaphor of Architecture

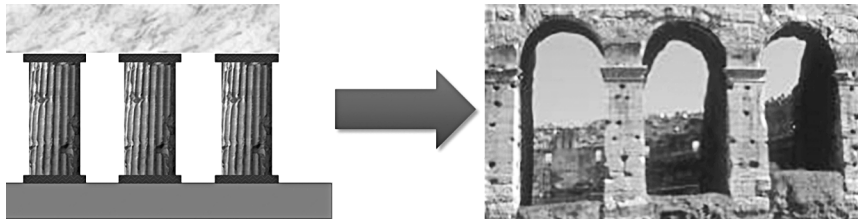
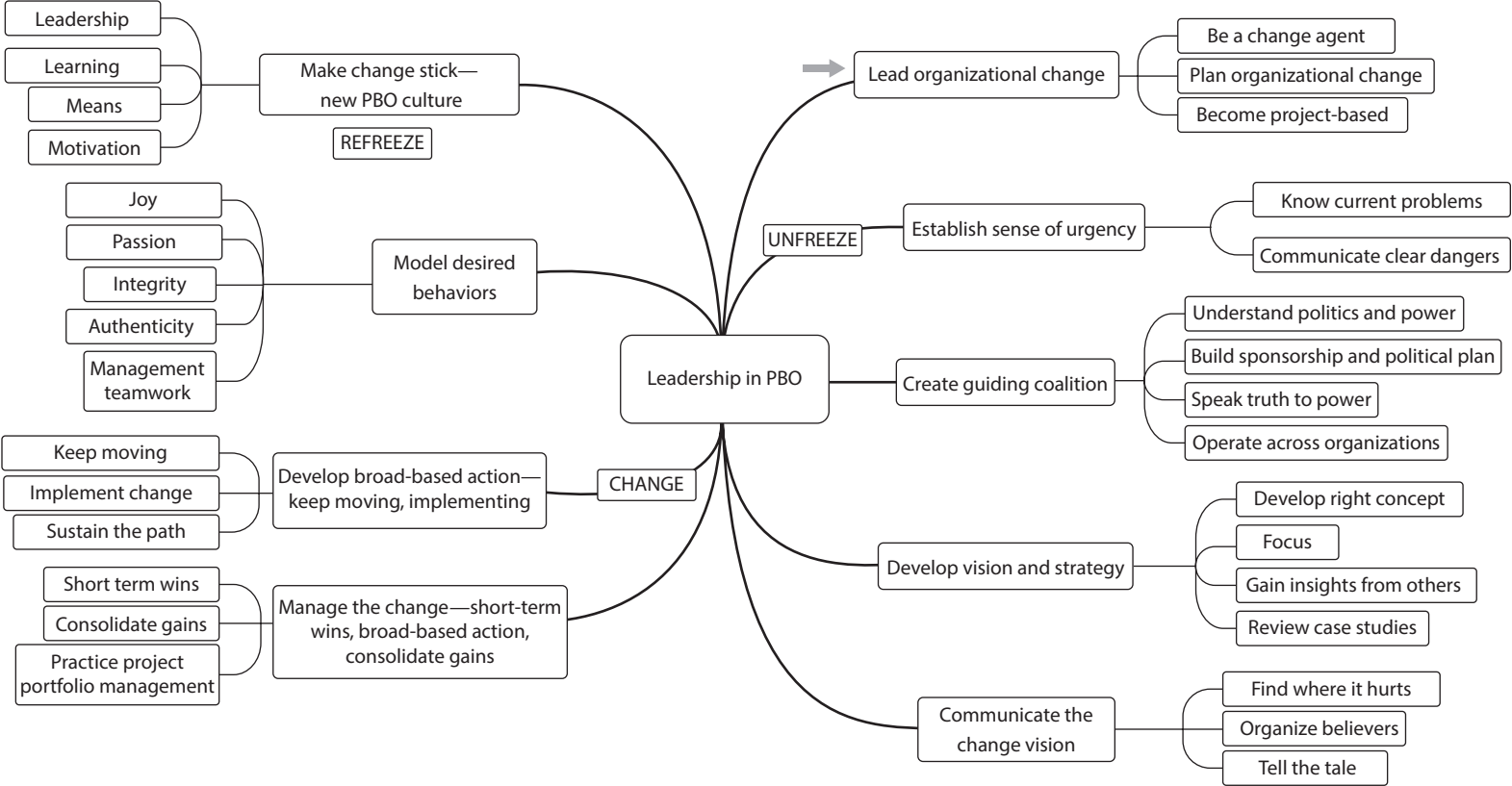


FIGURE E.1 A Project-Based Organization Change Management Process



Source: Adapted from Englund, Graham, and Dinsmore (2003).

FIGURE E.2 A Continuum Approach to Implementing Change



Appendix A: Analytical Hierarchy Process

The analytical hierarchy process is as follows:

1. Define the desired goal for the organization's set of projects.
2. Structure a hierarchy listing criteria under the goal and possible projects under the criteria. A criterion may have subcriteria. Determine the weighting for each criterion.
3. Construct a matrix comparing the relative contribution of each project with that of each other project for each criterion in the next higher level. Use a scale such as that in Table A.1 to indicate relative contribution. If a project does not contribute more than the one it is being compared against for that criterion, enter a reciprocal number (see Table A.2).
4. Obtain all judgments required to develop the matrix in step 3. Multiple judgments can be synthesized by using their geometric mean.
5. Repeat these steps for all levels in the hierarchy.
6. Compute the priorities for the projects, possibly using a computer and matrix algebra (see Saaty, 2012).

For example, say a group of upper managers get together to choose the best new projects for the product family. More choices are available than the organization has the capacity to support. The first task is to identify which criteria to enter into the decision-making process. After give-and-take discussion, it is decided that the criteria are price, key specifications, channel of distribution, and technology risk.

Next, the criteria are ranked according to priority by making pairwise comparisons between them. Which is the more desirable criterion and by how much: A price range or key specifications? Channel of distribution or key specifications? Technology risk or price range? These questions are asked about all possible pairs and recorded in Figure A.2.

TABLE A.1 A Scale for Pairwise Comparisons

Intensity of Importance	Definition	Explanation
1	Equal importance	Two elements contribute equally to the property
5	Essential or strong importance	Experience and judgment strongly favor one element over another
9	Extreme importance	The evidence favoring one element over another is of the highest possible order of affirmation
Reciprocals	When activity <i>i</i> compared with <i>j</i> is assigned one of the above numbers, then activity <i>j</i> compared with <i>i</i> is assigned its reciprocal.	

TABLE A.2 Matrix of Pairwise Comparisons

Project	A	B	C	D	E	Priority
A	1	7	6	4	2	.45
B	1/7	1	1/2	1/3	1/3	.05
C	1/6	2	1	1/3	1/4	.07
D	1/4	3	3	1	1/3	.14
E	1/2	5	4	3	1	.28

If five projects (A to E) are contending for the top new product slots as in Table A.2, compare Project A with each of the others on the first criterion, price. In the row for Project C, for example, the team determines that Project A is strongly preferred to C, so the cell gets a 1/6. However, Project C contributes moderately more than Project B, so that cell gets a 2. Project C compared with itself gets a 1.

Log the answers in a grid similar to Table A.2 using the scale from Table A.1. Compare the project along the side with the project across the top; if the side project is preferred over the top project, put a number in the appropriate cell depending on the degree of preference. If the top project is preferred to the side project, invert the number.

Complete the comparison of each project with each other one for the price criterion (see Figure A.1). The priority value for each project is obtained by multiplying its priority score from Table A.2 (0.45 for Project A) with the weighting factor for the criterion (0.238 for price). Then move to the next criterion (specification) and repeat the process. Do the same for the other two criteria. The result is a series of four boxes. The priority scores within each box are compared with the other boxes using the rank-order scoring decided on initially for the criterion. The outcome is one ordered list inclusive of all projects and all criteria. The team then reviews the list for consistency and

decides how to proceed. Initially Project A appears top priority. However, once all criteria are scored, a different result may appear.

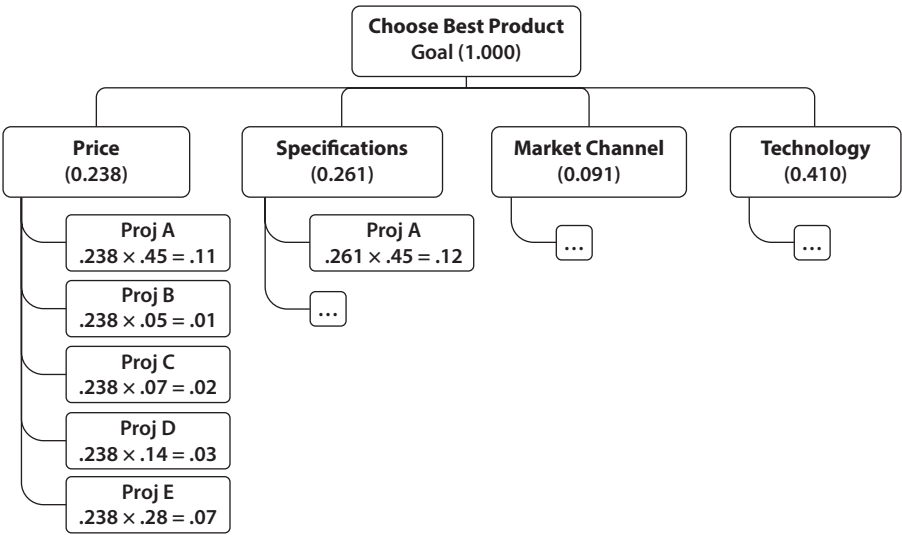
A detailed explanation for computing the priority scores and the final rank-ordering list according to Saaty (2012) is quite complex, involving eigenvalues and eigenvectors, so it is much easier to get a software package that does the computations. As an alternative, a spreadsheet could be constructed to normalize the numbers.

This process appears complex and analytical but is easy when a software tool handles the computations and the management team concentrates on the comparisons. It is thorough in guiding the team to consider all criteria, both emotional and logical, and to apply them to all projects. The software tool (“Expert Choice,” 2018) also pinpoints the inconsistencies recorded by the team and prompts further discussion to justify the scoring, make adjustments, or correct data entry errors.

This software tool offers several features:

- Team decision tools that allow participation anytime, anywhere in the world
- Project management tools to define participant roles and responsibilities
- Science-based analytics that translate team knowledge, expertise, and intuition into quantitative measures
- Insight and survey tools that resolve conflicting priorities, and achieve stakeholder understanding and consensus
- Structured, transparent decision making and risk assessment processes
- Actionable reporting outputs and improved communications
- Easy-to-use “what-if” scenarios (excerpted from Expert Choice software, 2018)

FIGURE A.1 Hierarchy Showing Prioritized Results for One Criterion



Appendix B: Project Portfolio Management Selection

TOOL SET: How to Select a Project Portfolio Management (PPM) Tool

Introduction

A host of Project Portfolio Management (PPM) tools are available in the marketplace. This tool set suggests steps to select the tool and solution that are a best fit for the purpose and deliver or exceed anticipated business benefits.

Ø Disclaimer: Make sure a PPM process has been developed and agreed upon before installing a software tool—the tool is not the process.

(Note that this selection process can be generically applied to most any software application.)

- 1. Define your objectives.** PPM tools can be seen by senior management as a silver bullet for a number of business problems (e.g., selecting the optimum project portfolio for an organization to invest in, improving governance of projects, or improving the way resources are managed). Step 1, therefore, is to define the business objectives of the PPM solution you are aiming to meet, and get agreement from the sponsor and senior stakeholders. It may seem basic, but this critical step is often overlooked.
- 2. Define your scope.** Once objectives are clear, define your scope in more detail. An effective way to do this is to use the MoSCoW rules of features prioritization that are often used in Agile developments:
 - M—MUST:** Describes a feature that must be included in the final solution in order for the solution to be considered a success.
 - S—SHOULD:** Represents a high-priority feature that should be included in the solution if it is possible within the available time/resources/bud-

get but that can be deferred/omitted without compromising the success of the solution.

C—COULD: Represents a feature that would be useful and could be included in the solution if it is possible within the available time/resources/budget but that can be deferred/omitted without compromising the success of the solution.

W—WON'T: Represents a feature that stakeholders have agreed will not be implemented initially but may be considered for the future.

It is tempting to go for the most expansive scope, but using MoSCoW rules helps focus on the important and critical ones. Remember, the bigger the scope, the bigger (usually) the cost of the subsequent implementation project.

3. **Review the marketplace for potential solutions, not potential tools.** It is tempting to develop a tools short list rather than a solutions short list. A critical success factor of implementing a PPM tool is to work with a solution provider that understands not just PPM but also your business and the most effective way to support you in your PPM implementation. You can select the best functionally rich tool in the marketplace, but if the implementation partner does not have capability, resource, or cultural fit, your PPM project will likely not succeed.

You could also use Google or LinkedIn forums to review the marketplace. One word of caution here is that some PPM vendors are one-man bands; thus, it is advisable to do a simple credit and capability check on vendors. Also, can a one-man band really give you the support that you need for a PPM implementation project?

4. **Run a vendor selection process.** Whether it is a formal request for proposal (RFP) process or a less informal set of requests and presentations, it is essential that each vendor demonstrate its system to you, ideally focusing on your areas of mandatory (the MoSCoW Must Have) requirements. Be careful of the slick salesperson who knows the product inside out but is nowhere to be seen during the implementation.

When conducting demonstrations, include key staff who would be involved in the process. During the selection period:

- a. Understand the technical requirements of the product and whether it will work in your infrastructure.
- b. Review the implementation process suggested by the vendor. Is it a switch-on, some training, then goodbye?
- c. Contact and visit reference sites with project organizations and challenges similar to yours.
- d. Review the contract. Often the contract is for monthly rental and can have a long termination notice.
- e. Objectively score the product, solution, and vendor capability.

- f. Agree to a pilot (typically three months). Expect to pay for a pilot, as it is unreasonable to expect a vendor to run a pilot for three months or longer for no fees.
 - g. Understand if your project processes need to be changed or enhanced to maximize the benefits from the new PPM tool.
 - h. Check whether the vendor can do “train the trainer,” as this may be a more cost-effective option than expensive consultants training each new starter.
- 5. **Run a pilot as a project and measure the results.** The pilot should pick a reasonably receptive area of the business that will look at a new PPM tool with a positive frame of mind. It defeats the objective of the pilot to select a business area that wants the pilot to fail, as it *will* fail with this mentality.
- 6. **Negotiate and agree on contracts.** Self-explanatory.
- 7. **Plan and launch the new PPM change project.** A PPM implementation project is a major change project and needs to be managed as one. Plan for sustainability. It is a mistake to think that tool implementation followed by training is sufficient to achieve the benefits that you set out in Step 1. Plan for resources to be expended so that the importance and the benefits of the PPM solution are regularly reinforced by sponsors and senior stakeholders.

Summary

We have seen many examples of PPM solutions delivering real business benefits to organizations. However, there are also many examples of expensive PPM solutions being heroic failures costing millions and used as a glorified timesheet or planning system. If you follow these seven steps, you will be on the right path to deliver real business value for your PPM project.

Appendix C: Assessment and Action Planning

The Environmental Assessment Survey Instrument (EASI) is available as an Adobe Acrobat form on the web at www.englundpmc.com (click on the “Offerings” tab), on the web at www.successfulprojectsonline.com, and in the book *The Complete Project Manager’s Toolkit* (Englund and Bucero, 2015).

Assess your environment using the form provided here or on the web. Review your answers to the EASI to see how you scored your specific project environment relative to how other project leaders scored theirs. The percentile table that comes with the benchmark report allows you to determine in what specific percentile you fall based on your average score in each of the ten components.

Use these data as a guide for preparing EASI action plans, following the Action-Plan template file that is available at www.englundpmc.com. The sample filled-in template provides examples of action steps that may increase your competitive advantage.

Tool Set: Environmental Assessment Survey Instrument

The purpose of the EASI is to measure how well the environment supports project management in your organization. The following questions refer to your current project. If you are not currently working on a project, or if your current project has just begun and you feel you cannot answer the questions appropriately, refer to the last project you worked on when answering these questions. If you are an upper manager, think of the project or projects with which you are most closely associated. Rate each statement using any number from a low of 1 to a high of 7. Use the following guidelines:

“1” means the statement is true to an *extremely small extent, never, or not at all*.

“4” means it is true to an *average extent, or about normal in degree or frequency*.

“7” means it is true to an *extremely large extent, always, or without fail*.

1) PROJECT BASED ORGANIZATION

1. Projects are important for the future of this organization.
2. Upper managers appreciate the role of project management.

3. The current organizational structure supports project work.
4. People in this organization embrace teams, consensus action, empowerment, trust, and open communication.
5. The organization adapts readily to change.
6. Managers are authentic and act with integrity.
7. Upper managers work together as a team.
8. Everyone acts with concern for the success of the project.
9. Success in the organization depends on the performance of all participants.
10. Clear measures are in place for project success.

_____ **Total: Project Based Organization: Average** _____

2) STRATEGIC EMPHASIS

11. I am aware of my organization's business strategy.
12. The project goal is clearly linked to a business strategic goal.
13. Team members understand how this project adds value to the organization.
14. Core team members participated in defining the project goal statement.
15. Consistent criteria were applied to select this project.
16. I know how this project links with other projects to implement organizational strategy.
17. This project was selected based on a comparative priority ranking of contribution to organizational strategy.
18. The team trusts upper management that this project is not likely to be canceled unless there is a change in strategy.
19. The project has a clearly defined, supportive upper management sponsor.
20. I can focus on this project without disruption from other projects.

_____ **Total: Strategic Emphasis: Average** _____

3) UPPER MANAGEMENT SUPPORT

21. Managers of all team members fully support the need for this project.
22. Upper managers allow the team to do the job without interference.
23. Upper managers do not change project specifications.
24. The project deadline was negotiated with the project sponsor.
25. Upper managers understand the benefits of project management.
26. The sponsor works with the project manager to negotiate any changes in schedule or resource levels.
27. Organizational reward systems properly motivate work on projects.

- 28. Upper managers are more interested in project results than they are in controlling the project.
- 29. I feel that upper managers fully understand the PM process.
- 30. Upper managers support the project planning process.

_____ **Total: Upper Management Support: Average** _____

4) PROJECT TEAM SUPPORT

- 31. (Most) project team members work full time on this project.
- 32. A core team has been established to work together from the beginning to the end of the project.
- 33. Project core team members are located together when they work on this project.
- 34. Project team members do not feel they are working on too many projects.
- 35. Teamwork is rewarded in this organization.
- 36. A customer or end user representative is on the core team.
- 37. Project team members want to be on this team.
- 38. Upper managers provide support for project start-up activities.
- 39. Upper managers do not interchange or pull people off projects.
- 40. All project team members feel responsible for the project success.

_____ **Total: Project Team Support: Average** _____

5) ORGANIZATION SUPPORT

- 41. Projects align with meeting the needs of customers.
- 42. Project priorities are consistent across the organization.
- 43. The organization rewards team members if they are successful on this project.
- 44. A consistent project management process or methodology is used.
- 45. Balance exists between the needs of projects and the needs of continuing operations within the organization.
- 46. The project manager position has the necessary scope and sufficient authority for the project size.
- 47. The organization supports desired behaviors with structure, measures, and rewards.
- 48. Projects integrate well across the organization.
- 49. Organizational structure supports rather than creates obstacles to project work.
- 50. The organization is flexible to accommodate project requirements.

_____ **Total: Organization Support: Average** _____

6) PROJECT MANAGEMENT INFORMATION SYSTEMS

- 51. The benefits of good communications are apparent to all stakeholders.
- 52. The project plan has been communicated to all project stakeholders.
- 53. Sharing information about this project reduces anxiety in the organization.
- 54. Team members are aware of deadlines for their activities.
- 55. Project team members communicate easily with each other.
- 56. People speak the truth to upper managers without fear of recrimination.
- 57. Communication and political plans are developed, used, and updated throughout the project.
- 58. Available information about the project answers stakeholder questions, is there when they need it, and is easy to understand.
- 59. The information system supports organizational learning.
- 60. Reports are streamlined and provide the basis for making decisions and taking appropriate actions.

_____ **Total: Project Management Information Systems: Average** _____

7) PROJECT MANAGER SELECTION AND DEVELOPMENT

- 61. This project has a single project manager appointed.
- 62. The project manager was selected based on a formal process.
- 63. Criteria for selection were based on ability to do the job, not as a reward for past work.
- 64. The project manager is enthusiastic about this project and managing it.
- 65. A curriculum is available that provides training on the necessary technical, behavioral, organizational, and business skills.
- 66. The project manager receives adequate training.
- 67. Project managers have the opportunity to network with other PMs and share best practices.
- 68. The organization has identified competencies and skills for project managers at different levels based upon project complexity.
- 69. The manager of this project has a clear development plan, or career path, to follow.
- 70. "Project Manager" is a recognized job title in this organization.

_____ **Total: Project Manager Selection and Development: Average** _____

8) A LEARNING ORGANIZATION

- 71. People on the project and across the organization believe that continuous learning is a priority.
- 72. Experimentation and creativity are encouraged.

73. Upper managers survey and act on employee feedback.
74. Decisions and action are based upon data and evidence available from a project management information system.
75. Project goals are balanced among performance, experience, and learning.
76. Upper managers encourage learning from mistakes as well as from successes.
77. A project review will be held at the end of this project.
78. Outcomes from the project review help improve the project management process.
79. The results of the project review will be shared with other teams across the organization.
80. Management will take action on key findings from the project review.

_____ **Total: Learning Organization: Average** _____

9) PROJECT OFFICE

81. There is a person or group in charge of improving project management in this organization.
82. Resources are available to assist starting or implementing stages in the project life cycle.
83. A project management methodology provides common terminology and consistent expectations for managing this project.
84. I know where to get project management training.
85. Consulting and facilitation assistance are available within the organization.
86. The project is listed on a master plan.
87. Administrative support is available for this project.
88. A central repository exists to capture and extract information on best practices.
89. I can access a mediator to resolve cross project or cross organizational issues.
90. A project office is available to help select, execute, and close my project.

_____ **Total: Project Office: Average** _____

10) PROJECT MANAGEMENT CULTURE

91. We have an inventory of all projects under way and proposed.
92. Management support for project work exists at all levels of the organization.
93. Project selection is a clear-cut process.
94. Upper managers model the desired behavior for project teams.
95. "Accidental project managers" are not the normal staffing process for projects.
96. Project management is viewed as a career position.
97. Reviews are conducted for all projects and shared with other project teams.

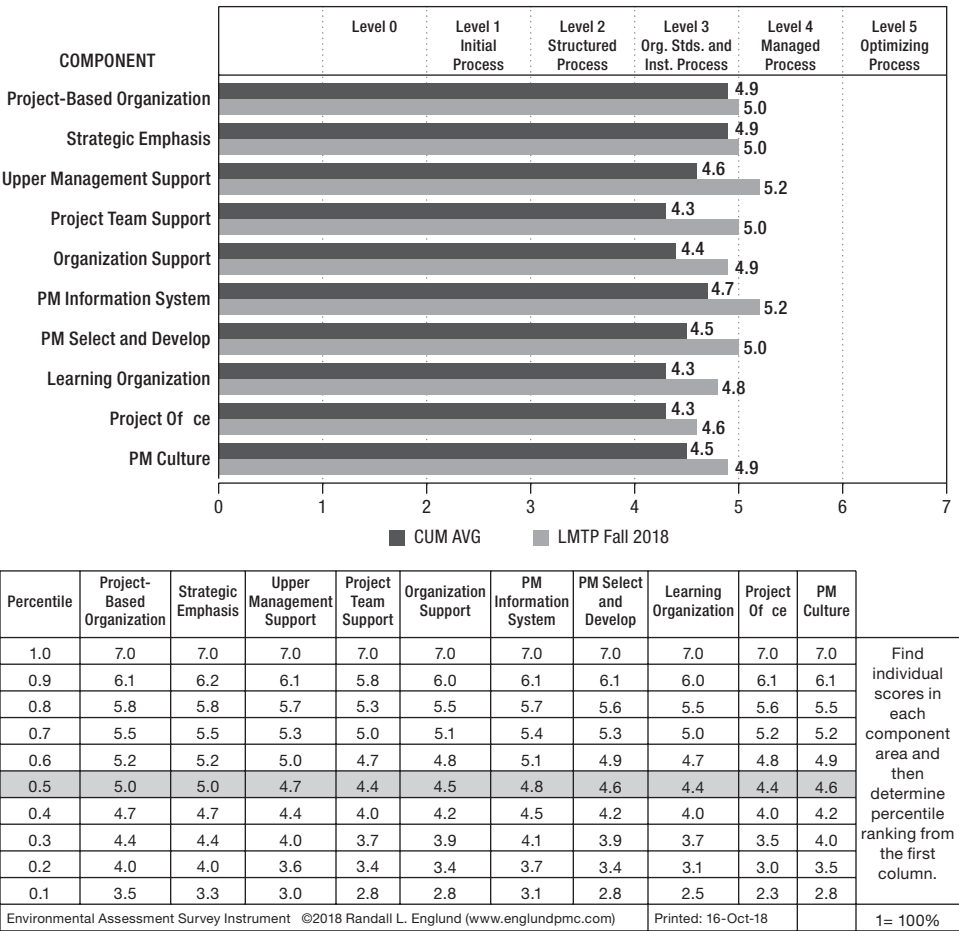
- 98. We function in a trusting, open environment.
- 99. Management values authentic behavior—saying what you believe.
- 100. We practice integrity in all interactions—doing what we said.

Total: Project Management Culture: Average

EASI Benchmark Report [Sample]

The benchmark chart in Figure C.1 summarizes the EASI for 13 participants in the online course. Average scores for this course are the lighter bars. The darker bars are the cumulative average for over 2,200 participants worldwide who have completed this survey to date. Course participants scored above average in all ten areas. The cumulative average is 4.5. The course average across all ten components is 5.0. Total individual averages from this course range from a high of 6.3 to a low of 3.4. Course project success scores are 5.1 compared with a cumulative success score of 5.0. All scores are based on a seven-point scale.

FIGURE C.1 Chart of EASI Benchmark



All results could be better. Look to leverage Upper Management Support and PM Information System to improve Learning Organization and Project Office. All areas would benefit by increased efforts to improve operating environments.

Literature research conducted by Alfonso Bucero found that top management support is the number one factor that contributes to project success. Using 750 surveys from 1,900 collected from project management seminars worldwide, a correlation study demonstrated that all variables used in the EASI model contribute to project success. However, the variable that contributes most statistically is Upper Management Support.

Review your answers to the EASI to see how you scored your project environment relative to other participants. If you scored near the mean, you are in the fiftieth percentile. The percentile table allows you to determine in what specific percentile you fall based on your average score in each of the ten components. Ask others in your organization to complete similar assessments, then compare results.

Use these data as a guide for preparing EASI action plans following an Action-Plan template.pdf file. A blank template, available from the “Offerings” section of the website www.englundpmc.com, can be edited from within Adobe Acrobat. Enter numeric scores from the benchmark data we are supplying and personal scores from your original survey. Put the cursor in the blank fields and type away with your action steps. Fonts automatically adjust. These data also serve to inform **Force Field** analysis exercises (see Englund and Bucero, 2019a, 2019b).

For areas in EASI where you scored high, what action steps can **you** take to reinforce, leverage, and expand the practices that led to that high score? Look for opportunities to share these best practices with others.

For areas where you scored low, what action steps can **you** propose to do differently or what practices will help you improve your score? Seek input from others who scored higher in these areas.

The benchmark scores help determine where you are compared with others. Use the data and action plans to communicate with others about the need and means to build on strengths and improve project environments. Organizations that sponsor and conduct the survey find more support for taking action on the findings. While the EASI is not totally comprehensive about the context for conducting projects in organizations, it offers a more complete view of the environment than focusing only on a project. Part of its value is just getting you to think about and be aware of these important areas. It becomes more valuable when a cross section of people in the organization complete the survey and compare results. You may also use insights gained from assessing your environment in modifying, upscaling, or downscaling your efforts, based on degrees of current support for project-based work.

The intent is to assess your environment and then identify practices that can be adopted, adapted, and applied in your organization. A sample filled-in template, also available on the englundpmc.com website, provides example action steps that may increase your competitive advantage. Describe efforts that contribute to creating an environment more conducive to project success. Use the Graham/Englund book *Creating an Environment for Successful Projects*, Third Edition, as a guide.

Remember that the environment strongly affects how successful projects will be in your organization. Please call on the authors if we may answer questions or assist you further.

All surveys conducted during the seminar are available as fill-in form files on the englundpmc.com website under the “Offerings” tab.

The next step is to complete an **Action Plan** with the template on the following pages.

Best wishes on all your projects!

EASI Action Plan 1

Creating an Environment for Successful Projects

Action Plan Template



Name:

Organization:

Date:

Project Based Organization	score <input type="text"/>	benchmark <input type="text"/>
<ul style="list-style-type: none">• Emphasis: <input type="checkbox"/> more <input type="checkbox"/> less <input type="checkbox"/> OK• Steps:	<div></div>	
Strategic Emphasis	score <input type="text"/>	benchmark <input type="text"/>
<ul style="list-style-type: none">• Emphasis: <input type="checkbox"/> more <input type="checkbox"/> less <input type="checkbox"/> OK• Steps:	<div></div>	
Upper Management Support	score <input type="text"/>	benchmark <input type="text"/>
<ul style="list-style-type: none">• Emphasis: <input type="checkbox"/> more <input type="checkbox"/> less <input type="checkbox"/> OK• Steps:	<div></div>	

EASI Action Plan 2

<div>Project Team Support</div> <div><div>• Emphasis:</div><div>• Steps:</div></div>	<div>score <div></div></div> <div><input type="checkbox"/> more</div>	<div>benchmark <div></div></div> <div><input type="checkbox"/> less <input type="checkbox"/> OK</div>
<div></div>		
<div>Organization Support</div> <div><div>• Emphasis:</div><div>• Steps:</div></div>	<div>score <div></div></div> <div><input type="checkbox"/> more</div>	<div>benchmark <div></div></div> <div><input type="checkbox"/> less <input type="checkbox"/> OK</div>
<div></div>		
<div>PM Information System</div> <div><div>• Emphasis:</div><div>• Steps:</div></div>	<div>score <div></div></div> <div><input type="checkbox"/> more</div>	<div>benchmark <div></div></div> <div><input type="checkbox"/> less <input type="checkbox"/> OK</div>
<div></div>		
<div>PM Selection & Development</div> <div><div>• Emphasis:</div><div>• Steps:</div></div>	<div>score <div></div></div> <div><input type="checkbox"/> more</div>	<div>benchmark <div></div></div> <div><input type="checkbox"/> less <input type="checkbox"/> OK</div>
<div></div>		

EASI Action Plan 3

Learning Organization <ul style="list-style-type: none">• Emphasis:• Steps:	score <input type="text"/> <input type="checkbox"/> more	benchmark <input type="text"/> <input type="checkbox"/> less <input type="checkbox"/> OK
<div></div>		
Project Office <ul style="list-style-type: none">• Emphasis:• Steps:	score <input type="text"/> <input type="checkbox"/> more	benchmark <input type="text"/> <input type="checkbox"/> less <input type="checkbox"/> OK
<div></div>		
Project Management Culture <ul style="list-style-type: none">• Emphasis:• Steps:	score <input type="text"/> <input type="checkbox"/> more	benchmark <input type="text"/> <input type="checkbox"/> less <input type="checkbox"/> OK
<div></div>		

Notes:

Appendix D: Additional Resources and Tools

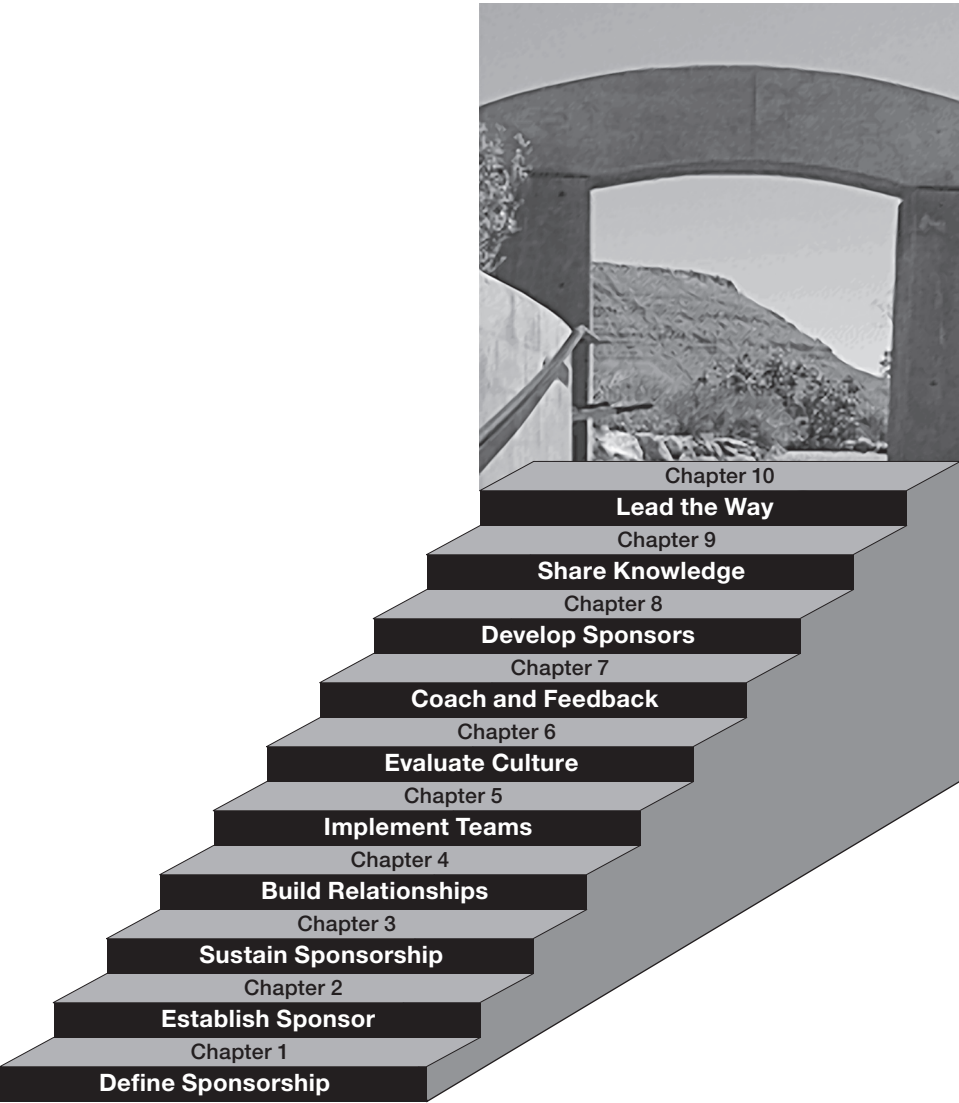
FIGURE D.1 Sample Resource Allocation Plan

FMY R&D FY Resource Allocation Plan

Project Description	Resource Requirements FY					Resource Capacity FY				
	Skill	Q1	Q2	Q3	Q4	Skill	Q1	Q2	Q3	Q4
1 Dynamic Adding Device (DAD)						A	Initial Resources			
						Design	8	8	7	7
						Electrical	15	14	13	13
						Thermo	10	10	11	11
						Mechanic	6	6	6	6
						TOTAL	39	38	37	37
	B					C	Remaining Resources			
	Design	3	3	3	3	Design	5	5	4	4
	Electrical	9	9	9	9	Electrical	6	5	4	4
	Thermo	5	5	6	6	Thermo	5	5	5	5
2 Mini Optical Model (MOM)	Mechanic	4	4	4	4	Mechanic	2	2	2	2
	TOTAL	21	21	22	22	TOTAL	18	17	15	15
	Design	4	4	3	3	Design	1	1	1	1
	Electrical	4	4	4	4	Electrical	2	1	0	0
	Thermo	3	3	3	3	Thermo	2	2	2	2
3 Supersaturated Observation Node (SON)	Mechanic	1	1	2	2	Mechanic	1	1	0	0
	TOTAL	12	12	12	12	TOTAL	6	5	3	3
	Design	1	1	1	1	Design	0	0	0	0
	Electrical	2	1	0	0	Electrical	0	0	0	0
	Thermo	2	2	2	2	Thermo	0	0	0	0

Note: Allocation of resources comparing capacity (starting top right) with requirements (middle), leaving the remaining resources (right): $A - B = C$.

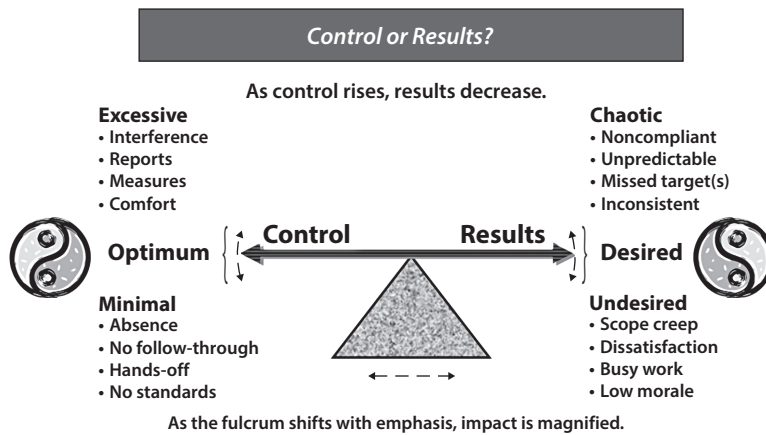
FIGURE D.2 Achieving Management Commitment to Project Success:
Steps Toward Excellence via Project Sponsorship



Source: Englund and Bucero, *Project Sponsorship*, 2015.

FIGURE D.3 An Organic Molecule of Complete Project Manager Skills



FIGURE D.4 Control versus Results**FIGURE D.5 Project Management Competencies**

The Competent Project Manager

- Be a results-oriented, can-do individual
- Have a head for details
- Possess a strong commitment to the project
- Be aware of the organization's goals
- Be politically savvy
- Be cost conscious
- Understand business basics
- Be capable of understanding the needs of staff, customers, and management
- Be capable of coping with ambiguity, setbacks, and disappointments
- Possess good negotiation skills
- Possess the appropriate technical skills to do his or her job

Source: Frame, *Project Management Competence*, 2007b.

FIGURE D.6 Grid of Emotional Quotient

<i>EQ Assessment</i>		
	What I See	What I Do
Personal Competence	Self-Awareness	Self-Management
Social Competence	Social Awareness	Relationship Management

Source: Goleman, 2002.

Appendix E: Project Review Questions

The project review questions are broken into four categories: project management practice, critical incidents, project results, and suggestions for the future. These questions cover the major categories of importance for most projects. However, if for a particular project an important category is missed, additional questions can be proposed by team members.

Individuals should first answer all the questions in this section and then analyze those answered no.

A. Project Management Practice

Was the project goal clear?

Was a core team established?

If yes, did it remain together for the entire project?

Was a detailed project plan developed?

If yes, did the core team participate in developing it?

Did the plan cover the entire process from concept to customer?

Was the project deadline truly negotiated with project sponsors?

Were core team members aware of the benefits of the project

for themselves?

for the organization?

Were core team members continually aware of what was expected of them?

and when it was expected?

Did top management support the project throughout its duration?

Was the customer or end user (or customer representative group) involved early in the project?

Was the customer fully informed of
project progress?
project changes?
project setbacks or failures?
project delays?

Were customer expectations
solicited?
included?
met?
exceeded?

Was project communication sufficient?

Were regular meetings held?

Was timely project information readily available?

Did team members know whom to contact if there was a delay or other problem?

Did the core team meet regularly with
upper management?
customer(s)?
contributing department managers?
other interested parties?

Did the project have a detailed budget?

Was it a help during the project?

Now review those questions answered no. What problems do you think may have been generated by the lack of that factor?

What did you do, or what could you have done, to rectify those problems? What changes or procedures would you recommend for future projects?

What practices that worked well would you recommend continuing?

B. Critical Incidents

Were there things on the project that seemed to go wrong due to a variety of outside forces? Describe these critical incidents. What could have been done (for example, what signal heeded, data tallied, or meetings held) to avoid or minimize these incidents? What do you recommend for future projects?

C. Project Results

How well do project results relate to the original plan?

What were the major deviations from the original plan?

Of the major deviations listed, which ones were caused by the following?

Lack of planning or planning technique skill

Lack of foresight, not seeing entire project process
Change in technology
Change in customer specification or expectation
“Random” events

D. Suggestions for the Future

What suggestions would you make to help minimize deviations from the plan?

What suggestions would you make to help discover necessary changes faster, especially in the beginning of the project, when making changes is much cheaper?

What suggestions would you make for project management in this organization?