THE HUMAN SIDE OF PROJECT MANAGEMENT

RUTH SIZEMORE HOUSE

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1

Dealing with Real Life

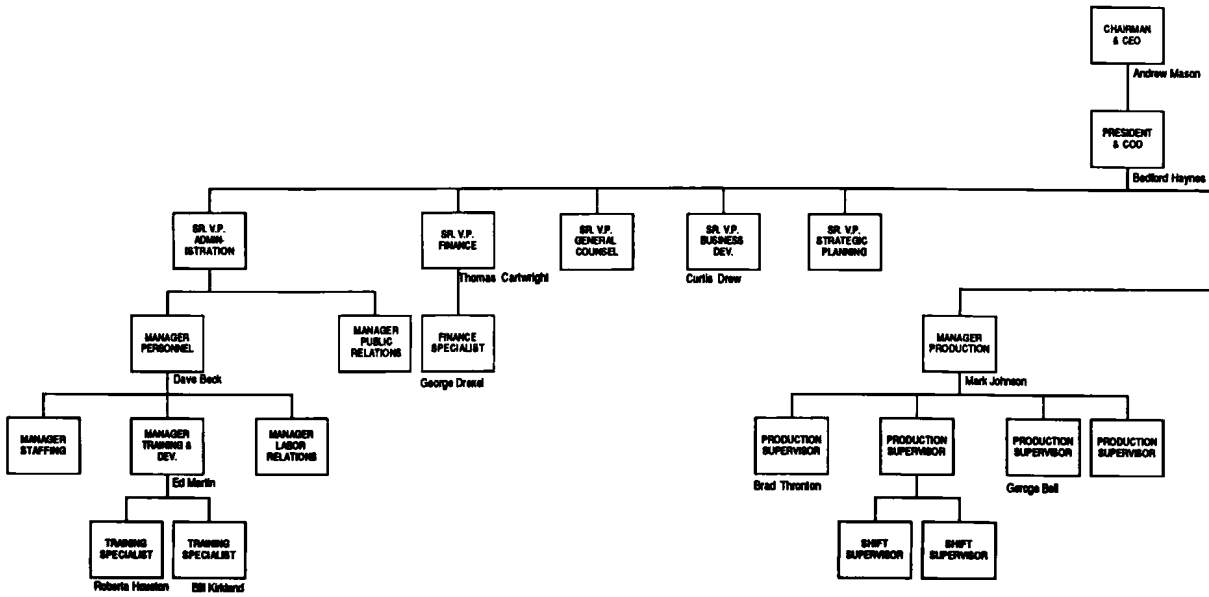
INTRODUCTION

"Life is what happens to you while you are making other plans." A. J. Marshall

That old management maxim, "Plan your work and work your plan," is easier said than done. Neither life nor work waits while we make our plans. The clock keeps ticking. It's hard not to get frantic and lurch forward without a map. But in project management, traveling without a map is a guarantee we'll be racing across a treadmill. As one driven project manager put it, "I'm tired. And I'm tired of 'excellence.' I'd cheerfully settle for sane, controllable mediocrity if I could just get off this roller coaster."

Not only is it hard to find the *time* to make things better, it's also hard to find the *way* to make them better. It's easy enough, if you're willing to invest the time, to read this theory or that theory—to peruse busloads of research data.

Figure 1–1
The Aerodigm Corporation Organizational Chart

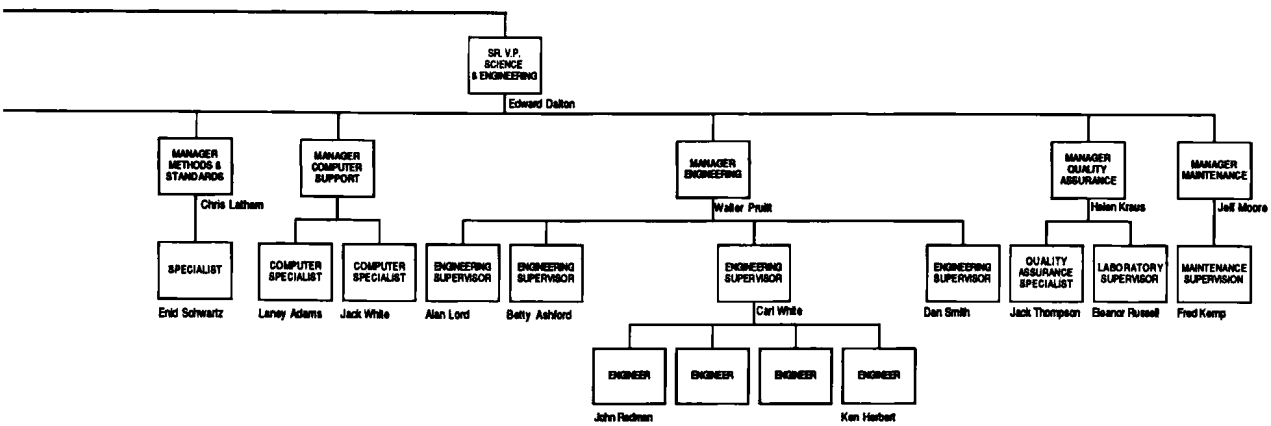


But putting those theories to work, applying the research to real life—that's the hard part. It's so difficult to make the translation that it often doesn't seem worth the time and trouble.

This book won't eliminate the need for effort on your part. It *can* make your exertion more efficient (1) by showing you how theory translates to practice in a fictitious company and (2) by transferring practice in the fictitious company to application in your real life. The setting for translating theory is the Aerodigm Corporation. The medium is a process which will be developed primarily through case studies. The vehicle for transferring the process back to your real life is the Project Partner, a final section in most chapters that you can use as a job aid. In this chapter we'll take a closer look at the setting for translating theory to practice, the medium for translating, and the vehicle for transfer.

THE SETTING

The Aerodigm Corporation is an aeronautical firm that includes both research and production. The core organization began as a family company, Airways Engineering. Since World War II, however, it has grown in leaps and bounds. It is now larger, more efficient, and—as the organization chart in Figure 1-1 shows—more complex than in the old days.



Crosscurrents among several of the top managers at Aerodigm influence the politics of projects:

Bedford Haynes, president and chief operating officer

Haynes is a graduate Mechanical Engineer and a Master of Business Administration. His family acquired a strong minority holding in Aerodigm before he came to Aerodigm as President two years ago. (The former president, Andrew Mason, is now chairman and CEO.) Haynes is very conservative financially. He's skittish about paper wheeling and dealing. He likes cash on the barrelhead transactions—not leveraged ones.

Thomas Cartwright, senior vice president, finance

Cartwright is often called "Colonel." His white hair, military bearing and booming, confident voice make a striking impression. Cartwright has the ability to sway people in his direction even when all previous decisions have gone the other way. He tends to present his ideas as rules or accepted facts. He's bright, thoroughly competent. He's clearly interested only in dollars. He's not concerned about the environment or about the company's public image.

Edward Dalton, senior vice-president, science and engineering

Dalton is a low-keyed but powerful rival of Thomas Cartwright. Like Cartwright, Dalton can be very persuasive. Unlike Cartwright, Dalton's loyalty is to the technology and to the mission not to the dollars. Dalton won't violate his principles, but you can expect him to oppose Cartwright whenever it's ethically possible.

And some middle managers will have even more direct impact:

Mark Johnson, production manager

Johnson is often in conflict with Walter Pruitt, the engineering manager. Among other things, Johnson has complained about the wording of engineering specifications, about sweatshop conditions in the plant, about company-wide standards. One way or another, Johnson implicates Pruitt in these complaints. But when it comes time for solutions . . . well, count Johnson out.

Chris Latham, methods and standards manager

Latham is a P.E. (professional engineer) with several advanced degrees. He's thoroughly competent as an engineer, but he's also thoroughly arrogant about his credentials. Whenever possible, he touts four-syllable words and long sentences. He generally gives the impression of being above it all.

Walter Pruitt, engineering manager

Pruitt really resents the time it takes to deal with interpersonal issues. Pruitt longs to simply avoid sources of conflict in the organization. He's great at the administrative end of management. But some people would call his style of supervision abandonment.

Jeff Moore, maintenance manager

Moore is often allied with Mark Johnson. He would also go a long way to undercut Walter Pruitt. Moore doesn't really like new team approaches. He'd rather tell and be told what to do. He generally feels that in-house projects are a waste of time.

Four project managers will be center stage:

Alan Lord, electronics engineer

Alan is managing a project which has only loosely defined outcomes. His assignment is to update plant control systems. Well, he's used to engineering much more complicated systems. He had expected smooth sailing. However, he now feels manipulated by his client, abandoned by his own management, and confounded by the behavior of his own team. Team members are Laney Adams,

computer specialist; John Redmon, engineer; and George Bell, production supervisor.

Betty Ashford, engineer

Betty's project is another one with only loosely defined outcomes. Betty is working with Roberta Houston, a training specialist, and with George Drexel, a finance specialist. Each team member is experienced in his own specialty but uninitiated in the other two. Furthermore, this is the first major project assignment for each of the three.

Carl White, mechanical engineer

Carl's assignment is to work with one person from each branch of science and engineering to revise operations standards. Carl has had a hard time getting through a commitment to priorities so that work can be scheduled and staffing decisions (along with other administrative decisions) can be made. Carl's team members are Fred Kemp, maintenance supervisor; Brad Thornton, production supervisor; Enid Schwartz, methods and standards specialist; and Jack Thompson, quality assurance specialist.

Dan Smith, engineer

Dan is managing a large project with well-defined outcomes. But the company doesn't have experience in the project technology. It would be easy for Dan and his team members to concentrate so intently on the technical side of the project that they ignore each other. However, Dan's team will have fewer interpersonal complications than the others. We'll look in on his team from time to time, but we won't stay for an extended visit as we will with other teams.

THE MEDIUM

When project management research and human relations research combine, the result is a process that activates four keys to project success:

- Key I: Plan the Interaction.
- Key II: Take a Closer Look at How Personal Styles Will Affect Project Success.
- Key III: Handle the Conflict.
- Key IV: Provide for the Routine Care and Feeding of the Project Team.

As a preliminary, we'll take a look at the backdrop that project management research and human relations research provide (Chapters Two and Three).

Next, a case description will introduce each key. Then individual chapters will develop the step by step process that activates each key. As we go, we'll see how the project managers you've just met apply each step at Aerodigm. We'll see how they—

I. Plan the interaction needed to get results across the "knotted line" (Key I). ("Knotted line" describes many situations more accurately than "dotted line" does.)

   A. Identify the management tools that are likely to contribute most to project success (Chapters Four and Five).

   B. Visualize the key people and their locations across boundaries in the organization (Chapter Six).

   C. Analyze conflicting pressures in the organization and the impact an idea will have on them (Chapter Six).

   D. Build key elements into a negotiation plan (Chapter Six).

   E. Organize what they know about key people and the interaction among them to get an edge on personality conflict (Chapter Six).

   F. Build a win-win presentation into their negotiation styles (Chapter Six).

II. Take a closer look at how personal styles will affect project success (Key II).

   A. Explore their own personal styles (Chapter Seven).

   B. Realistically envision how personal styles will affect their project (Chapter Seven).

   C. Decide when to just "live and let live"; when to modify their own behavior; when to give and get feedback about the effect a relationship is having on the job; when to negotiate for changes in behavior (Chapter Seven).

III. Handle the conflict (Key III).

   A. Expect conflict and plan ahead how to handle it (Chapter Eight).

B. Have their own stress management techniques in place *before* the project begins (Chapter Eight).

C. Serve as a lightning rod: listen and reflect (Chapter Nine).

D. Excavate the real issues underlying a conflict (Chapter Nine).

E. Look for win-win alternatives (Chapter Ten).

F. Cut their losses when necessary (Chapter Ten).

IV. Provide for the routine "care and feeding" of their project teams (Key IV).

A. Identify the interpersonal roles and skills needed to maintain and complete group action (Chapter Eleven).

B. Encourage group performance of these roles and skills (Chapter Eleven).

C. Develop missing roles and skills in other team members when possible (Chapter Eleven).

D. Supply missing roles and skills when needed (Chapter Eleven).

E. Recognize dysfunctional roles (Chapter Twelve).

F. Balance dysfunctional roles (Chapter Twelve).

Finally, we'll review the process with a more detailed checklist that you can use as a job aid back in real life (Chapter Thirteen).

THE VEHICLE FOR TRANSFER

The Project Partner sections at the end of Chapters Four through Twelve can help you transfer the practices at Aerodigm back to real life. These sections contain worksheets and exercises you can apply to a current project back on the job. The entire Project Partner is repeated at the end of this book, on perforated pages which can be removed from this volume and photocopied for use with your future projects.

2

Managing Projects: A Special Case

INTRODUCTION

It would be funnier if it weren't so true. Project management is different. Even an experienced line manager who has been assigned a project may feel he's facing an endless sequence of steps. And the steps even have steps.

As if that weren't enough, each step of a step has its own deadline and, as a result, its own pressure. One project manager put it succinctly: "We're in the business to make ulcers." And a number of textbook authors have agreed: "Projects have an inherent tendency to get out of control"; "projects tend toward entropy." The words are different; the sentiment is the same.

A few line managers might describe line management in the same doomsday terms. Most do not. Neither do textbook authors. Why is project management a special case?

Of course, the project technology could make ulcers. It could get out of control. It could tend toward entropy. But when people use those terms they are usually thinking of other project people not project technology.

Does a project result in personality change (as getting behind the steering wheel of a car sometimes does)? Does it create mass hysteria (as we used to see in monster movies such as *King Kong* and *Godzilla*)? Some would say, "Pretty close." But the real explanation lies in the complex relationships made necessary by the definition of "project" and by the purpose of a project approach. "Project" can be defined as an interrelated and primarily nonrepetitive set of activities which combine to meet certain objectives. The purpose of a project approach is to get maximum input from technical specialists and to do it efficiently. In this chapter we'll see how these inherent project conditions bring about relationships different from those in line management.

THE DEFINITION OF *PROJECT*

One more time. . . .

An interrelated and primarily non-repetitive set of activities which combine to meet certain objectives.

These tasks, for example, would qualify as projects:

- building a custom home;
- computerizing personnel records;
- engineering a rapid transit system.

These tasks would not qualify:

- building 116 identical apartment units;
- maintaining personnel records;
- manufacturing 54 transit vehicles.

Projects are different: each has a different combination of objectives; each has a different requirement for resources; each has a different environment. Some objectives may piggyback those in previous projects; but different combinations will require a new plan. Some reliable resources used in previous projects may be drawn on again; but different sequencing and a different marketplace will require new estimating, new evaluating, new scheduling. Some members of a previous project may work on the project team; but new priorities, new workload, new management will require a new analysis of the project environment and a new effort at team development.

Although he may work as if there's no tomorrow, the project manager needs to look at each project as if yesterday never happened. The nonrepetitive nature of a project results in task uncertainty. This isn't all bad. In fact, there's good reason to believe that project team members (especially in R & D) get along best and are happiest with their project manager when task uncertainty is high. But succeeding at an uncertain task will require close coordination with the parent organization and with the client. And high task uncertainty makes estimating time and materials tough. Some project managers would say useless. As a result they may ignore valuable planning and control techniques.

In one project, for example, the manager gave up pinning down objectives and controlling around them. His project was finally cancelled after its cost soared from $250,000 to $6.1 million and the time required mushroomed from nine months to over two years.

The nonrepetitive nature of a project also results in wide swings in resource needs. There will be times when team members feel they can't get enough done. Times when they can't get enough to do. Even when it has been carefully planned, a project will not need the same amount of time from the same kind of people throughout. There will be peaks and valleys. Both the work overload at the peaks and the boredom at the valleys can produce team dissatisfaction.

An industrial psychologist has this to say about the boredom. "When people become euphoric because it's Friday and depressed because it's Sunday night, that says a lot about how they feel about their work. How do you put a dollar value on that? There isn't enough money to compensate for a job that you hate" (Rice, 1985, p. 54).

And the interrelatedness of activities also has an affect on the peaks and valleys. Since many activities depend on the completion of a previous activity, one delay usually dictates many others. It has a domino effect. And if activities have been estimated accurately, playing catch-up is really difficult.

In a construction project, the domino effect might work like this. Control panels are late for delivery (the schedule suffers). Unsure when the panels will arrive, the subcontractor has people on standby (costs go up). When the panels finally arrive, the subcontractor puts people on overtime and works two shifts to make up for lost time (costs go up again). Under pressure from schedule and cost overruns, the subcontractor takes shortcuts in an attempt to catch up (technical quality suffers). Equipment fails to operate on a test run. It takes a day of troubleshooting to locate the problems: wiring errors resulting from time pressure and from shortcuts (the schedule suffers again). As a result, the work of a second subcontractor is delayed. (The impact—in sequence—on schedule, on cost, and on technical quality repeats itself.)

THE PURPOSE OF A PROJECT MANAGEMENT APPROACH

The project management approach is designed to get maximum input from technical specialists and to do it efficiently. In a line management operation, technical people often complain that their technical decisions are watered down by administrative decisions. The project management approach flattens the organization and makes that watering down less likely. For example, Betty Ashford (an engineer) manages a project that includes George Drexel (a financial specialist) and Roberta Houston (a training specialist). If Betty's project were to operate strictly within the limits of the organizational hierarchy, communicating with her project members would be cumbersome. George Drexel's technical input, for example, would be filtered through the senior vice-president of finance, the senior vice-president of science and engineering, and the manager of the engineering group. The odds of George's input reaching Betty intact are slim (see Figure 2-1).

But when the chain of command has committed money, time and staff, Betty's team can communicate using a project management model. Both George and Roberta can give their input directly to Betty. Betty can coordinate activities and keep the formal hierarchy informed (See Figure 2-2).

An entire organization built around project managers who borrow team members from functional managers is called a matrix