

Lessons for an Accidental Profession

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Projects and project management are the wave of the future in global business. Increasingly technically complex products and processes, vastly shortened time-to-market windows, and the need for cross-functional expertise make project management an important and powerful tool in the hands of organizations that understand its use. But the expanded use of such techniques is not always being met by a concomitant increase in the pool of competent project managers. Unfortunately, and perhaps ironically, it is the very popularity of project management that presents many organizations with their most severe challenges. They often belatedly discover that they simply do not have sufficient numbers of the sorts of competent project managers who are often the key driving force behind successful product or service development. Senior managers in many companies readily acknowledge the ad hoc manner in which most project managers acquire their skills, but they are unsure how to better develop and provide for a supply of well-trained project leaders for the future.

In this article, we seek to offer a unique perspective on this neglected species. Though much has been written on how to improve the process of project management, less is known about the sorts of skills and challenges that specifically characterize project managers. What we do know tends to offer a portrait of successful project managers as strong leaders, possessing a variety of problem-solving, communication, motivational, visionary, and team-building skills. Authors such as Posner (1987), Einsiedel (1987), and Petterson (1991) are correct: Project managers are a special breed. Managing projects is a unique challenge that requires a strategy and methodology all its own. Perhaps most important, it requires people willing to function as leaders in every sense of the term. They must not only chart the appropriate course, but provide the means, the support,

and the confidence for their teams to attain these goals. Effective project managers often operate less as directive and autocratic decision makers than as facilitators, team members, and cheerleaders. In effect, the characteristics we look for in project managers are varied and difficult to pin down. Our goal is to offer some guidelines for an accidental profession, based on our own experiences and interviews with a number of senior project managers—most of whom had to learn their own lessons the hard way.

“Accidental” Project Managers

Project managers occupy a unique and often precarious position within many firms. Possessing little formal authority and forced to operate outside the traditional organizational hierarchy, they quickly and often belatedly learn the real limits of their power. It has been said that an effective project manager is the kingpin, but not the king. They are the bosses, it is true, but often in a loosely defined way. Indeed, in most firms they may lack the authority to conduct performance appraisals and offer incentives and rewards to their subordinates. As a result, their management styles must be those of persuasion and influence, rather than coercion and command.

Because of these and other limitations on the flexibility and power of project managers, project

Having stumbled into the knowledge that project management has become a vital tool in their organizational processes, corporations now must learn how best to develop and use that tool.

management has rightly been termed the "accidental profession" by more than one writer. There are two primary reasons for this sobriquet. First, few formal or systematic programs exist for selecting and training project managers, even within firms that specialize in project management work. This results at best in ad hoc training that may or may not teach these people the skills they need to succeed. Most project managers fall into their responsibilities by happenstance rather than by calculation. Second, as Frame (1987) cogently observed, few individuals grow up with the dream of one day becoming a project manager. It is neither a well-defined nor a well-understood career path within most modern organizations. Generally, the role is thrust upon people, rather than being sought.

Consider the typical experiences of project managers within many corporations. Novice managers, new to the company and its culture, are given a project to complete with the directive to operate within a set of narrowly defined constraints. These constraints most commonly include a specified time frame for completion, a budget, and a set of performance characteristics. Those who are able to quickly master the nature of their myriad duties succeed; those who do not generally fail. This "fly or die" mentality goes far toward creating an attitude of fear among potential project managers. Generation after generation of them learn their duties the hard way, often after having either failed completely or stumbled along from one crisis to another. The predictable result is wasteful: failed projects; managers battling entrenched bureaucracy and powerful factions; money, market opportunities, and other resources irretrievably lost to the company.

The amazing part of this scenario is that it is repeated again and again in company after company. Rather than treating project management as the unique and valuable discipline it is, necessitating formal training and selection policies, many companies continue to repeat their past mistakes. This almost leads one to believe they implicitly view experience and failure as the best teacher.

We need to shed light on the wide range of demands, opportunities, travails, challenges, and vexations that are part of becoming a better project manager. Many of the problems these individuals struggle with every day are far more managerial or behavioral in nature than technical. Such behavioral challenges are frequently vexing, and though they can sometimes seem inconsequential, they have a tremendous impact on the successful implementation of projects. For example, it does not take long for many project managers to discover exactly how far their personal power and status will take them in interacting with the rest of the organization. Hence, an understanding of influence tactics and political

behavior is absolutely essential. Unfortunately, novice project managers are rarely clued into this important bit of information until it is too late—until, perhaps, they have appealed through formal channels for extra resources and been denied.

Consider the following examples:

- A long-distance telephone company whose CEO became so enamored of the concept of high-profile project teams—or "skunkworks," as they have come to be called—that he assigned that title to the few most highly visible, strategically important projects. Quickly, both senior and middle managers in departments across the organization came to realize that the only way to get their pet projects the resources necessary to succeed was to redesignate all new projects as "skunkworks." At last report, there were more than 75 high-profile skunkworks projects whose managers report directly to the CEO. The company now has severe difficulties in making research allocation decisions among its projects and routinely underfunds some vital projects while overfunding other, less important ones.

- A large computer hardware manufacturer has been dominated by the members of the hardware engineering department to such an extent that practically all new product ideas originate internally, within the department. By the time marketing personnel (sneeringly called "order takers" by the engineering department) are brought on board, they are presented with a fait accompli: a finished product they are instructed to sell. Marketing managers are now so cynical about new projects that they usually do not even bother sending a representative to new product development team meetings.

- A medium-sized manufacturing firm made it a policy to reward and punish project managers on the basis of their ability to bring projects in on time and under budget. These project managers were never held to any requirement that the project be accepted by its clients or become commercially successful. They quickly learned that their rewards were simply tied to satisfying the cost accountants, so they began to cut corners and make decisions that seriously undermined product quality.

- Projects in one division of a large, multinational corporation are routinely assigned to new managers who often have less than one year of experience with the company. Given a project scheduling software package and the telephone number of a senior project manager to be used "only in emergencies," they are instructed to form their project teams and begin the development process without any formal training or channels of communication to important clients and functional groups. Not surprisingly, senior managers at this company estimate that fewer than 30 per-

cent of new product development efforts are profitable. Most take so long to develop, or incur such high cost overruns, that they are either abandoned before scheduled introduction or never live up to their potential in the marketplace.

This ad hoc approach to project management—coupled, as it frequently is, with an on-the-job training philosophy—is pervasive. It is also pernicious. Under the best of circumstances, project managers are called upon to lead, coordinate, plan, and control a diverse and complex set of processes and people in the pursuit of achieving project objectives. To hamper them with inadequate training and unrealistic expectations is to unnecessarily penalize them before they can begin to operate with any degree of confidence or effectiveness. The successful management of projects is simultaneously a human and technical challenge, requiring a far-sighted strategic outlook coupled with the flexibility to react to conflicts and trouble areas as they arise on a daily basis. The project managers who are ultimately successful at their profession must learn to deal with and anticipate the constraints on their project team and personal freedom of action while consistently keeping their eyes on the ultimate prize.

From Whence Comes the Challenge?

One of the most intriguing and challenging aspects of project management lies in the relationship of project teams to the rest of the parent organization. With the exception of companies that are set up with matrix or project structures, most firms using project management techniques employ some form of standard functional structure. When project teams are added to an organization, the structural rules change dramatically. The vast majority of personnel who serve on project teams do so while maintaining links back to their functional departments. In fact, they typically split their time between the project and their functional duties.

The temporary nature of projects, combined with the very real limitations on power and discretion most project managers face, constitutes the core challenge of managing projects effectively. Clearly the very issues that characterize projects as distinct from functional work also illustrate the added complexity and difficulties they create for project managers. For example, within a functional department it is common to find people with more homogenous backgrounds. This means that the finance department is staffed with finance people, the marketing department is made up of marketers, and so on. On the other hand, most projects are constructed from special, cross-functional teams composed of representatives from each of the relevant functional depart-

ments, who bring their own attitudes, time frames, learning, past experiences, and biases to the team. Creating a cohesive and potent team out of this level of heterogeneity presents a challenge for even the most seasoned and skilled of project managers.

But what is the ultimate objective? What determines a successful project and how does it differ from projects we may rightfully consider to have failed? Any seasoned project manager will usually tell you that a successful project is one that has come in on time, has remained under budget, and performs as expected (that is, it conforms to specifications). Recently, though, there has been a reassessment of this traditional model for project success. The old triple constraint is rapidly being replaced by a new model, invoking a fourth hurdle for project success: client satisfaction. This means that a project is only successful if it satisfies the needs of its intended user. As a result, client satisfaction places a new and important constraint on project managers. No wonder, then, that there is a growing interest in the project manager's role within the corporation.

THE VITAL DOZEN FOR PROJECT MANAGERS

Over the last several years, we have conducted interviews with dozens of senior project managers in which we asked them a simple question: "What information were you never given as a novice project manager that, in retrospect, could have made your job easier?" From the data gathered in these interviews, we have synthesized some of the more salient issues, outlined in **Figure 1** and detailed below, that managers need to keep in mind when undertaking a project implementation effort. While not intended to appear in any particular order, these 12 rules offer a useful way to understand the challenge project managers face and some ways to address these concerns.

Figure 1 Twelve Points to Remember

1. **Understand** the context of project management.
2. **Recognize** project team conflict as progress.
3. **Understand** who the stakeholders are and what they want.
4. **Accept** and use the political nature of organizations.
5. **Lead** from the front.
6. **Understand** what "success" means.
7. **Build** and maintain a cohesive team.
8. **Enthusiasm** and despair are both infectious.
9. **One look** forward is worth two looks back.
10. **Remember** what you are trying to do.
11. **Use time** carefully or it will use you.
12. **Above all**, plan, plan, plan.

1. Understand the context of project management.

Much of the difficulty in becoming an effective project manager lies in understanding the particular challenges project management presents in most corporations. Projects are a unique form of organizational work, playing an important role within many public and private organizations today. They act as mechanisms for the effective introduction of new products and services. They offer a level of intraorganizational efficiency that all companies seek but few find. But they also force managers to operate in a temporary environment outside the traditional functional lines of authority, relying upon influence and other informal methods of power. In essence, it is not simply the management of a project per se that presents such a unique challenge; it is also the atmosphere within which the manager operates that adds an extra dimension of difficulty. Projects exist outside the established hierarchy. They threaten, rather than support, the status quo because they represent change. So it is important for project managers to walk into their assigned role with their eyes wide open to the monumental nature of the tasks they are likely to face.

2. Recognize project team conflict as progress.

One of the common responses of project managers to team conflict is panic. This reaction is understandable in that project managers perceive—usually correctly—that their reputation and careers are on the line if the project fails. Consequently, any evidence they interpret as damaging to the prospects of project success, such as team conflict, represents a very real source of anxiety. In reality, however, these interpersonal tensions are a natural result of putting individuals from diverse backgrounds together and requiring them to coordinate their activities. Conflict, as evidenced by the stages of group development, is more often a sign of healthy maturation in the group.

The result of differentiation among functional departments demonstrates that conflict under these circumstances is not only possible but unavoidable. One of the worst mistakes a project manager can make when conflicts emerge is to immediately force them below the surface without first analyzing the nature of the conflict. Although many interpersonal conflicts are based on personality differences, others are of a professional nature and should be addressed head-on.

Once a project manager has analyzed the nature of the conflict among team members, a variety of conflict handling approaches may be warranted, including avoidance, defusion, or

problem-solving. On the other hand, whatever approach is selected should not be the result of a knee-jerk reaction to suppress conflict. In our experience, we have found many examples that show that even though a conflict is pushed below the surface, it will continue to fester if left unaddressed. The resulting eruption, which will inevitably occur later in the project development cycle, will have a far stronger effect than would the original conflict if it had been handled initially.

3. Understand who the stakeholders are and what they want.

Project management is a balancing act. It requires managers to juggle the various and often conflicting demands of a number of powerful project stakeholders. One of the best tools a project manager can use is to develop a realistic assessment early in the project identifying the principal stakeholders and their agendas. In some projects, particularly those with important external clients or constituent groups, the number of stakeholders may be quite large, particularly when “intervenor” groups are included. Intervenors, according to Cleland (1983), may include any external group that can drastically affect the potential for project success, such as environmental activists in a nuclear plant construction project. Project managers who acknowledge the impact of stakeholders and work to minimize their effect by fostering good relations with them are often more successful than those who operate in a reactive mode, continually surprised by unexpected demands from groups that were not initially considered.

As a final point about stakeholders, it is important for a project manager's morale to remember that it is essentially impossible to please all the stakeholders all the time. The conflicting nature of their demands suggests that when one group is happy, another is probably upset. Project managers need to forget the idea of maximizing everyone's happiness and concentrate instead on maintaining satisfactory relations that allow them to do their job with a minimum of external interference.

4. Accept the political nature of organizations and use it to your advantage.

Like it or not, we exist in a politicized world. Unfortunately, our corporations are no different. Important decisions involving resources are made through bargaining and deal-making. So project managers who wish to succeed must learn to use the political system to their advantage. This involves becoming adept at negotiation as well as using influence tactics to further the goals of the project.

At the same time, it is important to remember that any project representing possible organizational change is threatening, often because of its potential to reshuffle the power relationships among the key units and actors. Playing the political system simply acknowledges this reality. Successful project managers are those who can use their personal reputations, power, and influence to ensure cordial relations with important stakeholders and secure the resources necessary to smooth the client's adoption of the project.

Pursuing a middle ground of political sensibility is the key to project implementation success. There are two alternative and equally inappropriate approaches to navigating a firm's political waters: becoming overly political and predatory—we call these people “sharks”—and refusing to engage in politics to any degree—the politically “naive.” Political sharks and the politically naive are at equal disadvantage in managing their projects: sharks because they pursue predatory and self-interested tactics that arouse distrust, and the naive because they insist on remaining above the fray, even at the cost of failing to attain and keep necessary resources for their projects.

Figure 2 illustrates some of the philosophical differences among the three types of political actors. The process of developing and applying appropriate political tactics means using politics as it can most effectively be used: as a basis for negotiation and bargaining. “Politically sensible” implies being politically sensitive to the concerns (real or imagined) of powerful stakeholder groups. Legitimate or not, their concerns over a new project are real and must be addressed. Politically sensible managers understand that initiating any sort of organizational disruption or change by developing a new project is bound to reshuffle the distribution of power within the firm. That effect is likely to make many departments and managers very nervous as they begin to wonder how the future power relationships will be rearranged.

Appropriate political tactics and behavior include making alliances with powerful members of other stakeholder departments, networking, negotiating mutually acceptable solutions to seemingly insoluble problems, and recognizing that most organizational activities are predicated on the give-and-take of negotiation and compromise. It is through these uses of political behavior that managers of project implementation efforts put themselves in the position to most effectively influence the successful introduction of their systems.

5. Lead from the front; the view is better.

One message that comes through loud and clear is that project management is a “leader intensive”

Figure 2
Characteristics of Political Behaviors

<i>Characteristics</i>	<i>Naive</i>	<i>Sensible</i>	<i>Sharks</i>
<i>Underlying Attitude</i>	Politics is unpleasant	Politics is necessary	Politics is an opportunity
<i>Intent</i>	Avoid at all costs	Further departmental goals	Self-serving and predatory
<i>Techniques</i>	Tell it like it is	Network; expand connections; use system to give and receive favors	Manipulate; use fraud and deceit when necessary
<i>Favorite Tactics</i>	None—the truth will win out	Negotiate, bargain	Bully; misuse information; cultivate and use “friends” and other contacts

undertaking. Strong, effective leaders can go a long way toward helping a project succeed even in the face of a number of external or unforeseen problems. Conversely, a poor, inflexible leader can often ruin the chances of many important projects ever succeeding. Leaders are the focal point of their projects. They serve as a rallying point for the team and are usually the major source of information and communication for external stakeholders. Because their role is so central and so vital, it is important to recognize and cultivate the attributes project “leaders” must work to develop.

The essence of leadership lies in our ability to use it flexibly. This means that not all subordinates or situations merit the same response. Under some circumstances an autocratic approach is appropriate; other situations will be far better served by adopting a consensual style. Effective project leaders seem to understand this idea intuitively. Their approach must be tailored to the situation; it is self-defeating to attempt to tailor the situation to a preferred approach. The worst leaders are those who are unaware of or indifferent to the freedom they have to vary their leadership styles. And they see any situation in which they must involve subordinates as inherently threatening to their authority. As a result, they usually operate under what is called the “Mushroom Principle of Management.” That is, they treat their subordinates the same way they would raise a crop of mushrooms—by keeping them in the dark and feeding them a steady diet of manure.

Flexible leadership behavior consists of a realistic assessment of personal strengths and weaknesses. It goes without saying that no one person, including the project manager, possesses

all necessary information, knowledge, or expertise to perform the project tasks on his own. Rather, successful project managers usually acknowledge their limitations and work through subordinates' strengths. In serving as a facilitator, one of the essential abilities of an exceptional project manager is knowing where to go to seek

"The intended user of the project is the major determinant of its success."

the right help and how to ask the right questions. Obviously, the act of effective questioning is easier said than done. However, bear in mind that questioning is not interrogation. Good questions challenge subordinates without putting them on the spot; they encourage definite answers rather than vague responses, and

they discourage guessing. The leader's job is to probe, to require subordinates to consider all angles and options, and to support them in making reasoned decisions. Direct involvement is a key component of a leader's ability to perform these tasks.

6. Understand what "success" means.

Successful project implementation is no longer subject to the traditional "triple constraint." That is, the days when projects were evaluated solely on adherence to budget, schedule, and performance criteria are past. In modern business, with its increased emphasis on customer satisfaction, we have to retrain project managers to expand their criteria for project success to include a fourth item: client use and satisfaction. What this suggests is that project "success" is a far more comprehensive word than some managers may have initially thought. The implication for rewards is also important. Within some organizations that regularly implement projects, it is common practice to reward the implementation manager when, in reality, only half the job has been accomplished. In other words, giving managers promotions and commendations before the project has been successfully transferred to clients, is being used, and is affecting organizational effectiveness is seriously jumping the gun.

Any project is only as good as it is used. In the final analysis, nothing else matters if a system is not productively employed. Consequently, every effort must be bent toward ensuring that the system fits in with client needs, that their concerns and opinions are solicited and listened to, and that they have final sign-off approval on the transferred project. In other words, the intended user of the project is the major determinant of its success. Traditionally, the bulk of the team's efforts are centered internally, mainly on their own concerns: budgets, timetables, and so

forth. Certainly, these aspects of the project implementation process are necessary, but they should not be confused with the ultimate determinant of success: the client.

7. Build and maintain a cohesive team.

Many projects are implemented through the use of cross-functional teams. Developing and maintaining cordial team relations and fostering a healthy intergroup atmosphere often seems like a full-time job for most project managers. However, the resultant payoff from a cohesive project team cannot be overestimated. When a team is charged to work toward project development and implementation, the healthier the atmosphere within that team, the greater the likelihood the team will perform effectively. The project manager's job is to do whatever is necessary to build and maintain the health (cohesion) of the team. Sometimes that support can be accomplished by periodically checking with team members to determine their attitudes and satisfaction with the process. Other times the project manager may have to resort to less conventional methods, such as throwing parties or organizing field trips. To effectively intervene and support a team, project managers play a variety of roles—motivator, coach, cheerleader, peacemaker, conflict resolver. All these duties are appropriate for creating and maintaining an effective team.

8. Enthusiasm and despair are both infectious.

One of the more interesting aspects of project leaders is that they often function like miniaturized billboards, projecting an image and attitude that signals the current status of the project and its likelihood for success. The team takes its cue from the attitudes and emotions the manager exhibits. So one of the most important roles of the leader is that of motivator and encourager. The worst project managers are those who play their cards close to their chests, revealing little or nothing about the status of the project (again, the "Mushroom Manager"). Team members want and deserve to be kept abreast of what is happening. It is important to remember that the success or failure of the project affects the team as well as the manager. Rather than allowing the rumor mill to churn out disinformation, team leaders need to function as honest sources of information. When team members come to the project manager for advice or project updates, it is important to be honest. If the manager does not know the answer to their questions, he should tell them that. Truth in all forms is recognizable, and most project team members are much more appreciative of honesty than of eyewash.

9. One look forward is worth two looks back.

A recent series of commercials from a large computer manufacturer had as their slogan the dictum that the company never stop asking "What if?" Asking "What if?" questions is another way of saying we should never become comfortable with the status of the project under development. One large-scale study found that the leading determinant of project failure was the absence of any troubleshooting mechanisms—that is, no one was asking the "What if?" questions. Projecting a skeptical eye toward the future may seem gloomy to some managers. But in our opinion, it makes good sense. We cannot control the future but we can actively control our response to it.

A good example of the failure to apply this philosophy is evidenced by the progress of the "Chunnel" intended to link Great Britain with France. Although now in full operation, it was not ready for substantial traffic until some 15 months later than originally scheduled. As a result, chunnel traffic missed the major summer vacation season with a concomitant loss in revenue. At the same time, the final cost (£15 billion) is likely to be six times the original estimate of £2.3 billion (O'Connor 1993). It is instructive to take note of a recent statement by one of the project's somewhat harassed directors who, when pressed to state when the Chunnel would be ready, replied, "Now it will be ready when it's ready and not before!" Clearly, the failure to apply adequate contingency planning has led to the predictable result: a belief that the project will simply end when it ends.

10. Remember what you are trying to do.

Do not lose sight of the purpose behind the project. Sometimes it is easy to get bogged down in the minutiae of the development process, fighting fires on a daily basis and dealing with thousands of immediate concerns. The danger is that in doing so, project managers may fail to maintain a view of what the end product is supposed to be. This point reemphasizes the need to keep the mission in the forefront—and not just the project manager, but the team as well. The goal of the implementation serves as a large banner the leader can wave as needed to keep attitudes and motives focused in the right direction. Sometimes a superordinate goal can serve as a rallying point. Whatever technique project managers use, it is important that they understand the importance of keeping the mission in focus for all team members. A simple way to discover whether team members understand the project is to intermittently ask for their assessment of its status. They should know how their contributions fit into the overall installation plan. Are they

aware of the specific contributions of other team members? If no, more attention needs to be paid to reestablishing a community sense of mission.

11. Use time carefully or it will use you.

Time is a precious commodity. Yet when we talk to project managers, it seems that no matter how hard they work to budget it, they never have enough. They need to make a realistic assessment of the "time killers" in their daily schedule: How are they spending their time and what are they doing profitably or unprofitably? We have found that the simple practice of keeping a daily time log for a short time can be an eye-opening experience. Many project managers discover that they spend far too much of their time in unproductive ways: project team meetings without agendas that grind on and on, unexpected telephone calls in the middle of planning sessions, quick "chats" with other managers that end up taking hours, and so forth. Efficient time management—one of the keys to successful project development—starts with project managers. When they actively plan their days and stick to a time budget, they usually find they are operating efficiently. On the other hand, when they take each problem as it comes and function in an ad hoc, reactive mode, they are likely to remain prisoners of their own schedules.

A sure recipe for finding the time and resources needed to get everything done without spending an inordinate amount of time on the job or construction site is provided by Gosselin (1993). The author lists six practical suggestions to help project managers control their tasks and projects without feeling constantly behind schedule:

- Create a realistic time estimate without overextending yourself.
- Be absolutely clear about what the boss or client requires.
- Provide for contingencies (schedule slippage, loss of key team member).
- Revise the original time estimate and provide a set of options as required.
- Be clear about factors that are fixed (specifications, resources, and so on).
- Learn to say "Yes, and . . ." rather than "No, but. . ." Negotiation is the key.

12. Above all, plan, plan, plan.

The essence of efficient project management is to take the time to get it as right as possible the first

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time. "It" includes the schedule, the team composition, the project specifications, and the budget. There is a truism that those who fail to plan are planning to fail. One of the practical difficulties with planning is that so many of us distinguish it from other aspects of the project development, such as doing the work. Top managers are often particularly guilty of this offense as they wait impatiently for the project manager to begin doing the work.

Of course, too much planning is guaranteed to elicit repeated and pointed questions from top management and other stakeholders as they seek to discover the reason why "nothing is being done." Experienced project managers, though, know that it is vital not to rush this stage by reacting too quickly to top management inquiries. The planning stage must be managed carefully to allow the project manager and team the time necessary to formulate appropriate and workable plans that will form the basis for the development process. Dividing up the tasks and starting the "work" of the project too quickly is often ultimately wasteful. Steps that were poorly done are often steps that must be redone.

A complete and full investigation of any proposed project does take significant time and effort. However, bear in mind that overly elaborate or intricate planning can be detrimental to a project; by the time an opportunity is fully investigated, it may no longer exist. Time and again we have emphasized the importance of planning, but it is also apparent that there comes a limit, both to the extent and the time frame of the planning cycle. A survey among entrepreneurs, for example, revealed that only 28 percent of them drew up a full-scale plan (Sweet 1994). A lesson here for project managers is that, like entrepreneurs, they must plan, but they must also be smart enough to recognize mistakes and change their strategy accordingly. As is noted in an old military slogan, "No plan ever survives its first contact with the enemy."

PROJECT MANAGERS IN THE TWENTY-FIRST CENTURY

In our research and consulting experiences, we constantly interact with project managers, some with many years of experience, who express their frustration with their organizations because of the lack of detailed explication of their assigned tasks and responsibilities. Year after year, manager after manager, companies continue to make the same mistakes in "training" their project managers, usually through an almost ritualized baptism of fire. Project managers deserve better. According to Rodney Turner (1993), editor of the *International Journal of Project Management*:

Through the 90's and into the 21st century, project-based management will sweep aside traditional functional line management and (almost) all organizations will adopt flat, flexible organizational structures in place of the old bureaucratic hierarchies. . . . [N]ew organizational structures are replacing the old. . . . [M]anagers will use project-based management as a vehicle for introducing strategic planning and for winning and maintaining competitive advantage.

Turner presents quite a rosy future, one that is predicated on organizations recognizing the changes they are currently undergoing and are likely to continue to see in the years ahead. In this challenging environment, project management is emerging as a technique that can provide the competitive edge necessary to succeed, given the right manager.

At the same time, there seems to have been a sea change in recent years regarding the image of project managers. The old view of the project manager as essentially that of a decision maker, expert, boss, and director seems to be giving way to a newer ideal: that of a leader, coach, and facilitator. Lest the reader assume these duties are any easier, we would assert that anyone who has attempted to perform these roles knows from personal experience just how difficult they can be. As part of this metamorphosis, says Clarke (1993), the new breed of project manager must be a natural salesperson who can establish harmonious customer (client) relations and develop trusting relationships with stakeholders. In addition to some of the obvious keys to project managers' success—personal commitment, energy, and enthusiasm—it appears that, most of all, successful project managers must manifest an obvious desire to see others succeed.

For successful project managers, there will always be a dynamic tension between the twin demands of technical training and an understanding of human resource needs. It must be clearly understood, however, that in assessing the relative importance of each challenge, the focus must clearly be on managing the human side of the process. As research and practice consistently demonstrate, project management is primarily a challenge in managing people. This point was recently brought to light in an excellent review of a book on managing the "human side" of projects (Horner 1993):

There must be many project managers like me who come from a technological background, and who suffered an education which left them singularly ill-prepared to manage people.

Leading researchers and scholars perceive the twenty-first century as the upcoming age of project management. The globalization of markets, the merging of many European economies, the enhanced expenditures of money on capital improvement both in the United States and abroad, the rapidly opening borders of Eastern European and Pacific Rim countries, with their goals of rapid infrastructure expansion—all of this offers an eloquent argument for the enhanced popularity of project management as a technique for improving the efficiency and effectiveness of organizational operations. With so much at stake, it is vital that we immediately begin to address some of the deficiencies in our project management theory and practice.

Project management techniques are well known. But until we are able to take further steps toward formalizing training by teaching the necessary skill set, the problems with efficiently developing, implementing, and gaining client acceptance for these projects are likely to continue growing. There is currently a true window of opportunity in the field of project management. Too often in the past, project managers have been forced to learn their skills the hard way, through practical experience coupled with all the problems of trial and error. Certainly, experience is a valuable component of learning to become an effective project manager, but it is by no means the best.

What conclusions are to be drawn here? If nothing else, it is certain that we have painted a portrait of project management as a complex, time-consuming, often exasperating process. At the same time, it is equally clear that successful project managers are a breed apart. To answer the various calls they continually receive, balance the conflicting demands of a diverse set of stakeholders, navigate tricky corporate political waters, understand the fundamental process of subordinate motivation, develop and constantly refine their leadership skills, and engage in the thousands of pieces of detailed minutiae while keeping their eyes fixed firmly on project goals requires individuals with special skills and personalities. Given the nature of their duties, is it any wonder successful project managers are in such short supply and, once identified, so valued by their organizations?

There is good news, however. Many of these skills, though difficult to master, can be learned. Project management is a challenge, not a mystery. Indeed, it is our special purpose to demystify much of the human side of project management, starting with the role played by the linchpin in the process: the project manager. The problem in the past has been too few sources for either seasoned or novice project managers to turn to in

attempting to better understand the nature of their unique challenge and methods for performing more effectively. Too many organizations pay far too little attention to the process of selecting, training, and encouraging those people charged to run project teams. The predictable result is to continually compound the mistake of creating wave after wave of accidental project managers, forcing them to learn through trial and error with minimal guidance in how to perform their roles.

Managing projects is a challenge that requires a strategy and methodology all its own. Perhaps most important, it requires a project manager willing to function as a leader in every sense of the term. We have addressed a wide range of challenges, both contextual and personal, that form the basis under which projects are managed in today's organizations. It is hoped that readers will find something of themselves as well as something of use contained in these pages. □

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