

CHAPTER NINE

Developing an IT Strategy

Mark Egan

FRED "FIREFIGHTER" FORSYTH HAS been leading the IT organization for his online commerce company for the past five years. Fred's company provides e-commerce sites for organizations that cannot afford to build their own sites and depends heavily on IT to support its customers. His team works very long hours and has gotten into a pattern of saving the day when they experience issues with the company's systems.

Fred does not have time to develop a long-term IT strategy, and since the company does not have a well-articulated business strategy, he has never spent much time in this area. His boss has raised systems reliability issues and customer complaints several times, and Fred has countered that more money is needed for IT and these problems will go away. Fred does consider his team very good at responding to issues and earned his nickname, "Firefighter," based on the countless times his staff members have had to respond to emergencies. He rewards his team for their rapid responses to these issues and feels his company has developed a greater appreciation for his team's abilities after the countless times they have responded to systems outages.

Fred rolled into the office on Friday around 10 A.M. after spending most of the night dealing with a recurring network issue that prevented customers from accessing their systems. His boss called him into his office. Fred expected a hero's welcome for resolving the network issue and wondered if he was finally going to get that senior vice president promotion to add to his CIO title. He was surprised when he was introduced to the new

IT leader who had just been hired and would be focused on developing a long-term IT strategy for the company.

This chapter shows how to develop a strategy for your IT organization and avoid getting overwhelmed with day-to-day issues. Many CIOs get caught up in tactical issues and never take the time to establish a future strategy for the organization. The process is not new or difficult, but many CIOs fail to devote the time to this area and end up like Fred.

OVERVIEW

Developing an IT strategy is critical for IT leaders. Unless your organization has developed an understanding of your future goals and objectives, you will not be successful in leading it forward. In the same manner that you must first decide where you want to live and build your dream house before engaging the architect and building contractors, you need to develop a future strategy in order to successfully build your IT organization.

This chapter is written for someone who has never developed an IT strategy in the past or needs to revise an existing strategy to align with the company's future direction. We first review the methodology you can use to develop your strategy and then go through the actual steps necessary to complete the strategy. It is important to note that this is a collaborative process between the IT organization and its business partners. You must actively engage them during the process and solicit their input during the development of the strategy. The IT strategy should be considered a component of an effective business strategy. Finally, we recommend that your strategy is a living document that is updated on a regular basis to support the evolving nature of your business. If you decide to enter a new market, offer new products or services, or change your business model, the IT strategy must be revised to support the business.

IT STRATEGY METHODOLOGY

The methodology for creating your IT strategy consists of three steps, and development of your improvement road map encompasses three critical elements, as shown in Figure 9.1.

The first step is to understand the current state of the IT organization. Key questions for determining current state include:

- Has the organization been successful in meeting the needs of the business?
- Are the relations between the IT organization and its business partners collaborative?
- Does the business feel that investments in the IT organization are providing the desired benefits?

It is important to take an objective view of how the organization is operating today and not make assume that things are going great.

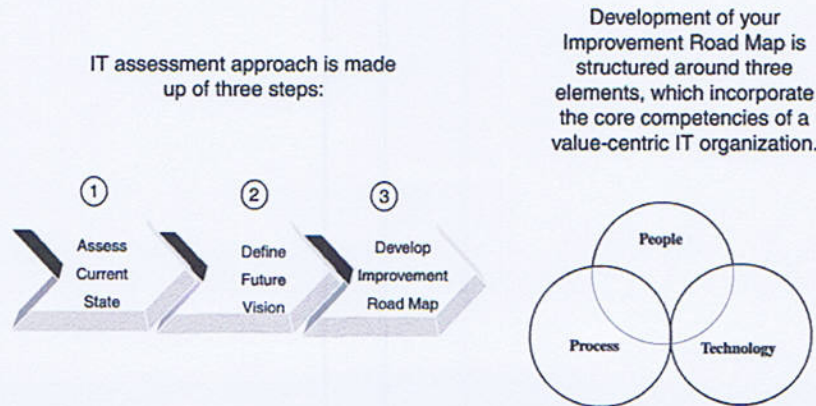


FIGURE 9.1 IT Assessment Methodology

Defining the future vision for the IT organization is the next step. During this step, it is important to understand the future business strategy and how the IT organization can enable the business to achieve its goals. Interviews with key business partners, such as product development and sales, are required to understand their future direction and areas that technology can assist. You should also conduct external research on how leading companies in your industry are providing technology solutions to support their business.

The final step is developing a road map to get you from where you are today to your future vision. This includes taking into account how much your company is willing to invest in the IT organization, along with realistic estimates for the time required to achieve your future state. We recommend that you develop a six-quarter (18-month) IT road map. Six quarters are long enough to make significant changes within the IT organization and in your ability to deliver meaningful benefits to the business. Note that your six-quarter road map will not be stagnant and should be updated on a quarterly basis.

The critical elements of your strategy include *people, process, and technology*. By far the most important is people:

- *People* means having the right team aligned with your business partners. This is essential for your success and we recommend that you devote considerable attention to this area. It is very often the case that you do not have an effective team and need to make some organizational changes. You need to take a hard look at the organization and decide if the team needs any upgrades to achieve your future vision. These upgrades may include hiring more senior-level staff, addressing skill-set gaps, or conducting additional training.
- *Process* can be thought of as glue that holds together the people and technology elements of your strategy. Frameworks such as the Information Technology Infrastructure Library (ITIL) and Control Objectives for Information and Related Technology (COBIT) exist with best practices for managing an IT organization. You need to evaluate the process maturity of your organization and determine whether

you need to make improvements in this area. Staff members often resist processes and view them as bureaucracy; however, as you grow your organization, you can no longer operate effectively without basic processes like incident, problem, and change controls in place.

- *Technology* is the remaining element of your strategy. Often CIOs spend an inordinate amount of their time in this area and do not give adequate attention to people and process. Technology is certainly important, considering the fact that the IT organization is expected to provide automation capabilities for the company; however too many CIOs get enamored with technology and focus primarily on this area to the detriment of the others. Key elements of your strategy include solutions that are flexible, cost effective, and can scale to meet future demands of the business.

We now walk through this methodology in greater detail and describe how it can be used to develop your IT strategy.

Step 1: Assess Current State of Your IT Organization

When assessing the current state of your IT organization, we encourage you to take a very objective view and expect to identify many areas of improvement. If you are an incumbent CIO, it is very easy to think that things are going well in your organization based on how hard you and the staff are working. You may well need to bring in a senior consultant to assist in the assessment. Newly hired CIOs have an easier time of taking an outsider's view of how well things are operating and identifying areas of improvement. Regardless of the situation, most IT organizations have areas that can be improved, and this is the time for a careful review.

Examples of key questions that should be answered during this assessment include:

- Are current business needs being met?
- Is the expected return on investments in technology being achieved?
- Is the project portfolio aligned with business objectives?
- Where does the technology directly touch your customers?
- Does the current organizational structure create barriers or inefficiencies?
- Are the skill mix and staffing levels in place sufficient?
- Are third-party resources being applied effectively?
- Are outsourcing opportunities identified and leveraged?
- Is your spending in line with that of your peers? What are your cost drivers?
- Is there an effective process for approving, managing, and overseeing projects?
- What is the vendor/partner selection and management process?
- How do you assess business risk and put risk mitigation programs in place?
- Are standard development processes defined and adhered to?
- What gaps exist in the architecture?
- How are new technologies evaluated and deployed?
- Will systems scale with corporate growth plans?
- How are new technologies evaluated and deployed?

We encourage you to spend a lot of time with your business partners to understand their future strategies and discuss how technology can assist in achieving their goals. We recommend that you interview your key business partners and ask these open-ended questions:

- Tell me about your business and plans over the next one to two years.
- Do you have any strategy documents that I can review?
- How well is the IT organization serving your business today?
- Do you have any suggestions on how we can improve our services?

The goal is to spend the majority of time in these meetings listening and learning more about your partners' current challenges and potential areas that technology can assist. A word of caution: If you ask for feedback, be prepared to hear about things that are not working well within IT today, and use this information to identify areas of improvement. Communication is very important during this process. We recommend that you summarize the results of your discussions in an e-mail to your business partners to validate what you heard and explain what you intend to do to improve things. The end result of this phase is to summarize your current state. Table 9.1 provides an example that you can use.

The red, yellow, and green ratings can be used to highlight areas of improvement in simple terms that your business partners can understand. Do not use a lot of technical

TABLE 9.1 IT Assessment Summary Example

IT Element	Current State	Rating	Corrective Actions
People	Very complex IT organizational model	Red	Simplify IT organization model and align to business partners
	Inexperienced staff responsible for applications functions		Hire experienced IT leader who can build a management team
	Business partners are not sure whom to contact for IT services		Clarify IT roles and business partner engagement process
Process	No formal process to review and prioritize IT requests	Yellow	Establish executive-level governance board
	Limited management metrics on effectiveness of IT group		Develop small number of IT performance metrics
	Basic IT processes, such as change control, are not in place		Adopt process framework, such as ITIL, as overall methodology
Technology	Systems instability and staff focused on day-to-day activities	Yellow	Develop overall IT architecture to guide future investments
	Limited business intelligence capabilities exist today		Invest in business intelligence for competitive advantage
	Recent security issues and no formal risk management program in place		Hire experienced security leader and develop security program

jargon, as this will confuse everyone and limit the effectiveness of this assessment. Based on the results of your current-state assessment, we are ready to proceed to the next step of defining your future state.

Step 2: Define Your Future Vision

When defining your future vision, you need to strike a balance between a bold, forward-looking strategy for your organization and something that you can reasonably deliver in the next two to three years. The overall vision for your organization should not really change over time, and your strategies should be focused on major deliverables that you plan to accomplish over the next couple of years. This is the time to reach out externally to understand industry best practices for similar companies that you can implement for your business. Too often CIOs are internally focused. Now is the time to reach out to your peers, industry analysts, consultants, and vendors to understand the possibilities that exist for your company.

Major components of your future vision should include:

- IT vision statement
- Key business strategies that the IT organization will assist the company in achieving
- Major IT strategies that you plan to employ over the next couple of years to assist business partners in achieving their business strategies

An example of an IT vision statement might be: “Company X business partners are delighted with the services provided by the IT organization.” This vision will not change over time, and staff members within the organization will strive to provide excellent services to their business partners.

It is important to understand your company’s future business strategies in order to identify areas in which the IT organization can provide the most value. If these strategies are published, you can validate your understanding during interviews with members of the management team. Otherwise, you will need to draft your understanding based on these conversations. Key business strategies for your organization might include:

- Grow the business 30 percent over the coming year by introducing two new product lines.
- Improve customer satisfaction and achieve highest industry rating as measured by independent survey.
- Reduce costs by 25 percent through selective outsourcing and supply chain management.

From an IT perspective, it is important to have IT that align with these business strategies and demonstrate how the organization is adding value and contributing to the business goals. Note that it is possible that the company may not have well-articulated goals; this may make it harder to demonstrate how the IT organization is enabling the

business. In either case, your IT strategies should contribute to one or more of these areas: increase revenue, improve customer satisfaction, reduce costs, and meet compliance requirements.

Major IT strategies fall into two categories: internal IT and business enabling. Internal IT strategies might include IT organizational structure, technology refresh, governance, or process improvements. Examples of business-enabling strategies would be specific initiatives that would assist the sales organization to grow the business, help the product development organization develop products quicker, or cost-savings initiatives through automation of tasks that are performed manually today.

Provide management with alternative proposals, usually based on level of investment and desired time frame, to achieve the future vision. IT is competing with many other investment priorities. You need to be realistic regarding the level of resources the company can devote to this area. Table 9.2 shows a high-level framework that you can provide to management to determine your investment strategy.

TABLE 9.2 IT Investment Alternatives Framework

Alternative	Major Programs	Time Frame	Estimated Incremental Costs	Business Benefits
Aggressive implementation	Hire third-party integrator to accelerate IT strategy implementation. Reorganize IT under experienced leader. Establish IT governance board to oversee program.	12 months	\$10–20 M	Improve IT performance in shortest time frame possible. Will require considerable shift in business priorities and IT funding.
Accelerated implementation	Hire third party to assist in IT program implementation. Continue with existing IT leadership and reevaluate management team. Provide business executives regular updates on IT program.	18–24 months	\$5–10 M	Improve IT performance with minor shift in business priorities and funding.
Incremental improvements	Leverage third parties in selected areas. Maintain status quo with existing IT leader and management. Formalize program and provide regular updates on progress at lower levels in organization.	24–36 months	\$1–2 M	Least costly alternative. No shift in existing business priorities or funding.

When generating alternatives, start with your existing organization and budget, and provide management with an estimate of how long it will take to achieve your future vision. Your second and third alternatives can add additional resources and/or shorten the expected time frame. This is an iterative process and a great opportunity to spend more time with your business partners to ensure that you understand their business requirements and how the IT organization can enable the organization to be successful. Once you have locked down the investment envelope and desired time frame to achieve your future vision, you are in a position to develop a more detailed implementation road map.

Step 3: Develop Improvement Road Map

The improvement road map is how you take your future vision for the IT organization and convert it into reality. Based on your investment envelope, you need to flush out the individual elements of your strategy. These strategies fall into the three elements that we discussed previously: people, process, and technology. Each of these elements will have three to five individual strategies that will comprise your overall IT strategy. Next we review each of these elements in more detail.

People

As discussed previously, people are the most difficult area and the one that we recommend you devote considerable time and attention to. Having a great IT team that is organized well and aligned with the business is essential for success. For this reason, consider structuring your organization like the business. For example, if you are functionally organized with global leaders of sales, product development, and so on, we recommend that your IT organization has teams that support these functions. However, if you have a line-of-business structure with general managers, we recommend that you have IT groups aligned with these businesses. Your goal is to make it very easy for your business partners to do business with the IT organization, including knowing whom to contact for assistance.

IT governance is another critical area that needs to be established in order for an IT organization to be successful. Demands for IT requests always exceed the company's ability to fund this area, and a fair and consistent process needs to be established. It is critical to establish an IT governance board, IT steering committee, or other mechanism for business leaders to evaluate major IT initiatives and determine which ones are the most important for the company. These groups should be cross-functional and include senior-level staff members who can make investment decisions for the company. Critical objectives for these groups include oversight of the major IT programs and approval of future IT investments, and meetings should be held on a monthly or quarterly basis. Of equal importance is the governance that is put in place beneath this executive level to execute to the direction provided by the business leaders. Typically, this working-level group is supported by the establishment of a program management office and accompanying methodologies and processes.

Staff development and training is another area that should be included in your overall strategy. Because the IT field changes rapidly, programs need to be put in place to ensure that your staff members are trained on the latest developments. If this area is overlooked, IT organizations either have to use consultants or continuously hire new staff with current skills. Included in this area is the need for individual development plans for staff members and documented succession planning for key executive and management roles. Finally, one word of caution: Beware of a strategy that overemphasizes staffing your key positions with internal resources only. Although such a strategy may have worked well for prior IT generations, today's IT world is moving far too quickly to be able to rely only on resources who have been brought up through company ranks. An appropriate mix is suggested to ensure that new thinking is introduced into your organization when and where needed.

IT sourcing is another area that you need to include in your overall strategy. No organization can be good at everything, and you need to analyze what you view as your core competencies, areas in which you will spend the time to hire and develop skilled staff. Examples of skills that we recommend you always keep in house would be architecture, business analysis, vendor management, and program management. Context skills are those that you should consider for outsourcing to third parties. Applications maintenance, quality assurance, and help desk functions are examples of functions that you may want to outsource. Keep in mind that each company will have unique requirements. You need to go through core/context analysis to determine your company's sourcing strategy.

These are a few examples of people strategies that you should consider for your IT strategy. Each organization is different and will have unique areas that need to be developed. As mentioned, the people area is the hardest one to perfect. Hire the best staff possible, and keep them closely aligned with your business partners. Do not compromise in this area or be pressured to accept less effective staff since your success relies heavily on having the right team in place.

Process

Process is the glue that binds the people with the technology to ensure that the overall IT organization works effectively. Many IT organizations do not spend enough time in this area, seeing it as slowing things down or downright boring. Process should be viewed like brakes on a car, which are provided to allow the car to go faster, not slower. When approaching overall IT processes, consider following a framework such as ITIL. This framework has a catalog of standard processes, such as change management and problem management, that should be adopted by your organization. The infrastructure organization, in particular, needs to pay close attention to processes, and following this framework can speed up the adoption cycle. If your team or clients are not ready for ITIL terminology, many ITIL concepts can be adopted in advance of a full-blown ITIL implementation. Start by setting up ITIL training for IT leadership and some of your most forward-thinking business partners.

Focus on a couple of processes at a time since it takes a while for the organization to adopt them in their day-to-day operations. Typically, an internal IT program should be established that prioritizes the processes needed and launches focused projects in a staggered fashion to ensure optimal adoption and minimize disruption.

IT investments are often one of the largest capital expenses in the company, along with facilities, and processes need to be put in place to ensure that these investments are carefully evaluated. The IT leader should partner closely with the finance organization to ensure that business cases are developed for proposed IT projects and return on investment (ROI) analysis has been performed. IT projects are competing for scarce resources with other investments within the company, such as the decision to open a new office. The business has many competing priorities and IT projects should follow same ROI analysis as IT investments. Too often departments that are very vocal about their needs, without adequate business justification, get all the attention (projects); checks and balances need to be in place for these investments.

Development of critical metrics to measure the overall effectiveness of the IT organization is essential to demonstrate that the organization is improving over time. Service organizations, such as IT, can be viewed as merely cost centers. Metrics can be used to identify areas of investment along with key drivers for these expenses. For example, the help desk may be spending an inordinate amount of time supporting a given department with e-mail issues and may determine that some training is required. The majority of applications development staff members may be spending time on an end-of-life finance application while ignoring requests for a sales application that can generate additional revenue. At the very least, you should establish a typical best practices operations review process. Each of your direct reports should identify the top three performance metrics that are critical to their success and present these metrics over time with clear goals identified for each one. These metrics should be compiled into a single report and reviewed monthly. Each missed goal should result in a remediation plan.

Communication is another area to which many IT organizations do not devote the necessary time and resources. Technical staff members are not always the best communicators and can easily confuse business partners with technical jargon. This can lead to bad relations between the organizations, and a decline in the level of cooperation. Hiring a communications staff within IT or soliciting help from the corporate communications organization can assist in this area. Implementing new technology will require changes to how the business is operating, and human nature does not always embrace change. Clear, crisp communications inside and outside of the IT organization can help in this area and facilitate change within the organization. A top-notch communications manager will implement a variety of mechanisms, such as business partner and department-wide meetings and newsletters, to ensure that expectations are clear and well managed with your business partner and internal IT staff.

These are a few examples of processes that you should consider for your organization. Implementation of a continuous improvement program can help to drive the

overall process maturity within the organization. Your continuous improvement program should identify those processes that are critical to running an effective IT organization for your company and track progress toward achieving your ultimate goals. Keep in mind that these programs will require time, and management focus and discipline are necessary for them to be successful.

Technology

Technology is the final element of your strategy and an area that some IT organizations overemphasize. Do not underestimate the ability of technology to assist in the transformation of the business; however, first you must ensure that you have the right people and processes in place. One of the first areas to address is an overall technical architecture for the company. Just as an architect develops blueprints of a house for a builder, an IT architecture serves as the broad basis for deployment of technology. Your architecture should encompass these areas: business architecture, data architecture, applications architecture, and technical/infrastructure architecture.

Business architecture covers business goals, business functions or capabilities, and business processes and roles. This architecture is direction setting for the business and should drive all other architecture development. Business functions and business processes are often mapped to the applications and data they need in order to operate. Keep in mind that this information may not exist for your organization, and you may need to draft your understanding of the company's business architecture based on interviews with business leaders. From a pragmatic perspective, it may be easier to focus on a few key areas of the business, such as order to cash, and identify how process simplification and automation can assist the business achieve future goals.

Data architecture is very important. Be prepared for multiple sources of key information, such as customers, products, and employees and poor data quality that must be addressed before new systems can be implemented. Identifying business owners for data is important to ensure that you can clean up data and keep it clean on an ongoing basis. These data owners are often referred to as data stewards, and they play a key role in systems projects. If they do not already exist, partner with the appropriate business leaders to develop key integrated data sources, such as customer and vendor master files.

Applications architecture includes all the major business applications that are used to run your business. These systems are often separated into back-office enterprise resource planning and front-office portals and customer relationship management (CRM) systems. Portals and CRM systems support the revenue-generating activities of the company. This is an area to which you should try to devote more IT resources. Investments in these systems can provide the highest ROI, and IT organizations should attempt to place a great focus on this area.

Technical/infrastructure can be viewed as the "plumbing" that everything runs on and includes the hardware, network, and voice technology. These systems need to be scaled to support future business growth and resilient to ensure they are available

24 hours a day. Recent trends are headed toward renting infrastructure resources via cloud technology and paying for resources only when required. Infrastructure investments can be costly. IT organizations are encouraged to develop a balanced strategy of investing in critical infrastructure that cannot be easily purchased as a service and relying on third parties for the remainder.

The technology section of your IT strategy will be very company specific. Your focus should be on identifying areas in which technology can have the highest impact on the business and quickly delivering solutions. Technology evolves very quickly. IT organizations need to constantly evaluate new offerings to determine if they can be of use. Further, keep an eye on end-of-life systems and technology, and ensure that you develop upgrade plans that will allow you to provide continuous support of these systems.

Improvement Road Map Summary

Your IT road map should consist of a series of individual strategies that you intend to deliver over time. Strategies that you might include for your company are:

- **People:** IT organization, IT governance, sourcing, staff development and training
- **Process:** ITIL implementation, metrics and reporting, investment analysis, and communications
- **Technology:** Business, data, applications, and infrastructure architecture; company-specific technology initiatives such as sales force automation; technology refresh initiatives

The template in Figure 9.2 can be used to summarize each of these individual strategies in a consistent and easy-to-read format.

Each of your strategies will have a long-term objective, along with specific milestones that you plan to accomplish in the area. For example, your IT organization strategy may include an overall objective to be customer focused and include several milestones, such as a reorganization and training required to meet that objective. It is important to strike a balance between identifying all the key strategies for your organization and focusing on a limited number of areas that you can expect to improve over the next one to two years.

The summary of your strategy is your overall IT road map and includes the expected time frame to deliver your strategy. Recommendations in this area include organizing your road map by key business partners, such as sales and marketing, and using a six-quarter time frame. Six quarters provides adequate time to deliver programs that may take more than one year to complete and provides visibility into the organization's longer-term strategy. Figure 9.3 provides an IT road map example.

Note the legend that identifies projects that are approved/proposed, along with project that have been delayed from their original delivery date. Most IT organizations should be able to summarize their strategy in two pages. This road map can be an

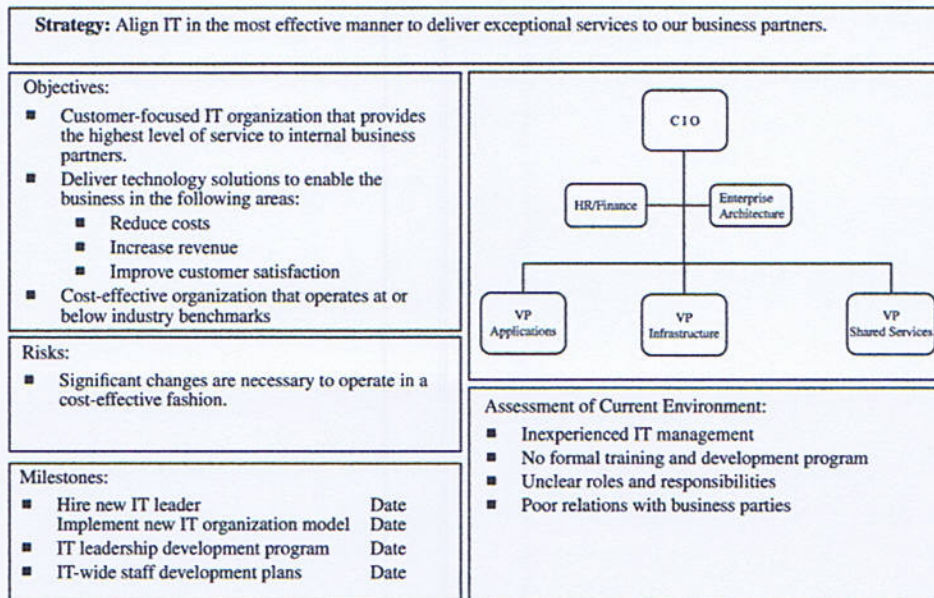


FIGURE 9.2 IT Strategy Example: Organizational Structure

effective vehicle for management discussions on IT programs. The IT road map should be viewed as a living document and updated on a regular basis.

Final IT Strategy Document

The final IT strategy must be easily understood by management and must address critical business objectives. Guidelines for developing the document include:

- Highly graphical
- Management summary of one page
- Overall document is 25 pages or less
- Include bold recommendations on sweeping changes you plan to make in order to transform the organization over the next two to three years

Your IT strategy should establish aggressive but achievable plans that you are committing to deliver. The costs associated with your recommendations are going to be significant and normally will require board approval, so you must deliver on these commitments. You need to keep a high level of communications during this time frame and test your recommendations during the development process to improve management acceptance. Finally, you must ensure that the key objectives are understood by the entire IT team and that your management's objectives are tied to successful delivery. Whenever you have the opportunity to address large groups of staff members, reinforce the strategy and key priorities.



FIGURE 9.3 Six-Quarter Road Map Example

SUMMARY

Development of an IT strategy is the most effective way of communicating with your business partners on how you intend to support their business strategies. The day-to-day pressures of running an IT organization can easily divert team attention to tactical activities, and people can lose focus on delivering business value. This chapter provides a three-step process of assessing where the IT organization is today, defining your future vision, and developing an improvement road map. IT leaders need to allocate time each year for their teams to go through this process and ensure that the organization has a clear path going forward. Resist the urge to go into firefighting mode and solve today's problems. In partnership with key business leaders, today's CIO needs to be bold and establish a vision for his or her organization and lead teams going forward in order to be successful and add maximum value to the organization.