

# Program and Project Management

## LEARNING OBJECTIVES

**After reading this chapter, you should be able to:**

- Understand the difference between program management and project management.
- Describe the makeup of the project management office (PMO) and the areas it needs to address in an ERP implementation.
- Appreciate the skills needed to be a project manager.
- Identify critical success factors in an ERP implementation.
- Realize the value of a change control process for managing scope creep.

**CASE 8-1****Opening Case***ABC Manufacturing: A Hypothetical Case in Unresolved Issues*

The manufacturing company called ABC Manufacturing, which produces do-dads and thing-ama-bobs that fit on the dashboards of cars, decided to take a look at their competition. A team made up of senior management, area directors, and staff concluded that a new ERP system would help to integrate its processes and speed up order processing, thereby improving time to market. Several competitors had already completed an ERP implementation and claimed dramatic improvements in order processing and increased customer satisfaction. Even though the company believed that the ERP would improve the overall bottom line, many of the staff were skeptical. The company proceeded to purchase an ERP system, and the project teams were assembled. A project manager, Mr. Trevor Mackenzie, was assigned to the project from the internal IT department, but no one in that department had ever implemented an ERP before. The staff assigned to the project were chosen by the department heads to work on the project full time, and an implementation consulting firm was chosen to work with the manufacturing company to implement the system.

All of the teams were excited and eager at project start-up. The teams evaluated the software based on current practices and identified areas that did not fit the current environment. The team leads passed the recommendations along to the project manager for review and submission to the change control board. The board agreed to all but four changes. Those four changes were turned down because there were indications that there were workarounds and that the business practice needed to change. The subject matter experts on the teams believed that the four modifications should be made and that the workarounds would be very time consuming. Several months went by as the implementation proceeded and modifications were made to the system. Testing the system was now well under way. During the testing phase it was clear a number of changes needed to be made for the system to work in the manufacturing company's environment. The project slowed, more changes were made, and the testing time was extended. Training was delayed due to the changes in the system, and users continued to make requests for changes. After several delays the system testing was at a standstill. At this point the project executive, Kathleen Taylor, called a halt to the project to find out what was happening and what needed to be completed for the system to go live.

**CONCLUSION**

Management often does not realize that ERP projects are doomed for disaster. ABC Manufacturing seemed to have a number of components in place to be successful: enthusiasm and buy-in from both management and staff, along with a good rationale for change. Without realizing what was happening, initial project decisions, especially in the skill set and experience of the project manager and those assigned from the functional departments, set the project up for failure. After several delays caused the project to flounder, Kathleen Taylor made the right call to halt what was happening in order to evaluate what needed to be addressed for the implementation to move ahead.

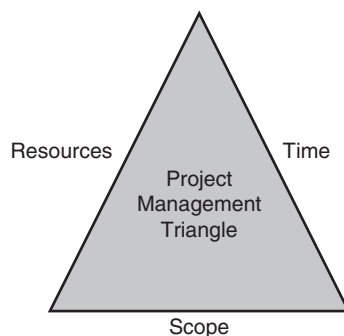
## PREVIEW

The project team, with a solid understanding of the concept of teamwork, will create a strong foundation for implementing an ERP that will meet the business objectives on time and budget. This was not the case with the ABC Manufacturing ERP implementation. The lack of project management skills and experience and the make-up of the teams were problematic from the project's start. Most project teams are made up of a variety of staff and consultants. Each team member should have expertise in an area (i.e., functional or technical) and understand the importance of teamwork. Even though the ABC Manufacturing teams were eager, they lacked the full understanding of the task in front of them and the teamwork needed to sustain the implementation. Teambuilding exercises, training, or both will make for a work climate in which progress and creativity will thrive.

The project management office (PMO) is responsible for ensuring that project teams are working well together and addressing the functionality issues in a timely, open, and efficient manner. The PMO needs to make certain that team activities stay synchronized and that progress is made. If teams become fragmented, it will often slow down an entire project, especially if teams are dependent on each other for decisions. The PMO must manage scope, resources, and time, as shown in Figure 8-1. If any one of the three sides of the triangle changes, then the other two sides will also need to change or the sides of the triangle will never meet. In other words, if the scope changes, then either resources or time will need to change (or both) for the sides of the triangle to remain connected.

The skill set of a project manager must be varied and robust. This was not the case for ABC Manufacturing. In fact, their project manager had never before implemented such a large ERP system. A project manager must be able to address issues related to how the system works, and have good negotiation skills, work well with the teams, and be politically savvy to navigate through the implementation. For these reasons and others, being part of the PMO can be both high risk and high reward. Even though a project manager is mostly focused on tactical areas within an ERP implementation, a program manager or project executive is strategically focused. The role of the program manager is to ensure that business goals are met. Both project and program managers must address areas that are critical to the success of the project.

Although the PMO must focus on the implementation, it must also address the critical success factors on a regular basis as they relate to the decisions process, project scope or changes to scope, teamwork, and communications with the team and executives. There was not enough time spent on the scope and developing user buy-in in the ABC Manufacturing example. In addition, the project manager was not skilled enough to manage “scope creep” to ensure that the project moved forward. The project manager may have avoided many of the issues around the modifications and scope through an



**FIGURE 8-1** Project Management.

increased use of communications and discussions with the teams to understand the team issues better and how the scope and modifications would affect the implementation. As the project moved forward, the project executive needed to bring the project manager and teams together to review the status of the project. In doing this, management would begin to regain the trust lost early on regarding the project.

## PROJECT TEAM

Program management and project management are often used interchangeably, yet there are significant differences between the two. Before discussing the topic of what role program management has, it is important to define what it is. “Program management is the coordinated management of interdependent projects over a finite period of time in order to achieve a set of business goals”<sup>1</sup> and “focuses on achieving business results to create a competitive advantage while project management focuses on planning and executing the work required to deliver the end product.”<sup>2</sup> Project management is tactically focused, whereas program management is strategically focused. Companies sometimes choose to use only a project management approach to projects (e.g., an ERP implementation). This approach is often problematic in that projects may meet their goals with regard to cost, quality, and time, yet fall short of meeting the business objectives originally outlined in their business case. ERP implementations often consist of several projects simultaneously. Each project manager is concerned with his or her own piece of the overall puzzle; but it’s the program manager who must link many different individual projects, that are often missing, together and make sure that the overall business goals are managed and addressed. The program manager might also be managing projects that have nothing to do with the ERP implementation, but which do contribute to the overall business goals. “In the program management model, the program manager manages across the multiple functional projects, while the project manager manages within a single functional project.”<sup>3</sup>

When a company decides to implement an ERP, a business case must be created that outlines the business goals to be achieved. The primary goal should never be simply to upgrade existing legacy systems to a more robust ERP. There should be true business goals that the company must meet as a result of the implementation (e.g., improved customer service, increased market share, and cost savings or cost avoidance). The actual ERP implementation will require several different project teams over the course of several months or years. It is the role of the program manager to keep all of these projects moving in the same direction to achieve the business goals outlined in the business case. Each individual project manager has his or her own goals to manage in a project. The sum of the successful individual projects equates to the achievement of the overall business goals. “Program management integrates the individual elements of the projects in order to achieve a common objective.”<sup>4</sup>

Program management (Figure 8-2) is the responsibility of the project executive (sometimes called the project director). Both the project executive and the project manager(s) make up the majority of the PMO. Even though the PMO ensures that project teams are moving forward, they must

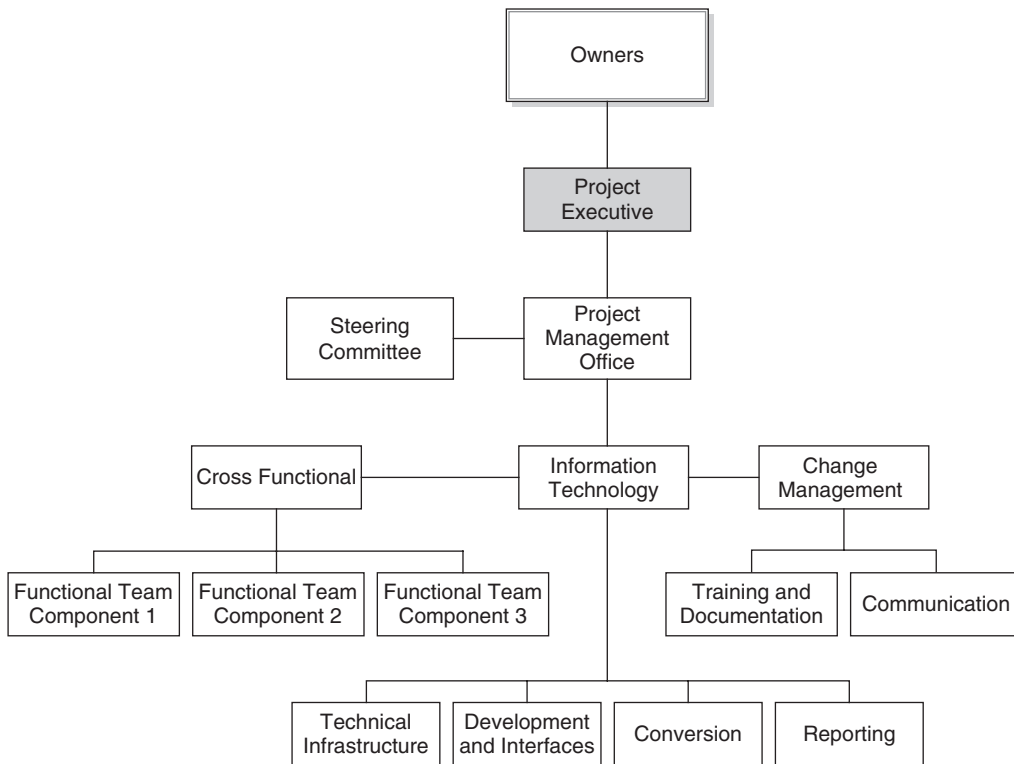
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<sup>1</sup> Martenelli, R., and Waddell, J. (October 2004). Program Management: Linking Business Strategy to Product and IT Development. [www.pmforum.org/library/papers/prgmgmt.doc](http://www.pmforum.org/library/papers/prgmgmt.doc) (accessed May 1, 2005).

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.



**FIGURE 8-2** Sample Organization Project Executive.

also continue to evaluate risks, manage the resources (i.e., human and financial), and be sensitive to new issues arising that may cause delays. This work can be both exciting and exhausting; in addition, it is complex and time sensitive. The PMO's ability to work well together often determines how well the implementation meets its goals.

In Chapter 4, the roles, responsibilities, and skills needed for each area within the project organization will be discussed. The PMO will need to address the skills of each team in evaluating risks and success factors. Even though the technical and functional skills are important, the skills related to teamwork and productivity are just as important. As with any organization, projects must address the team and cross-team dynamics. The issues of ensuring that team players are in key positions and identifying the team players from the individual contributors are one of the many factors the PMO will need to address. It is critical not to put individual contributors in a lead role. This will increase risk and create problems within the team. Projects require a lot of communication and face-to-face meetings. Training in conducting efficient and effective meetings, along with how to participate in meetings, will increase the concepts of teamwork and productivity.

MODULE EXPERTS AND SUBJECT MATTER EXPERTS

*Module Experts* (Figure 8-3) are responsible for analyzing requirements and converting them into solutions within the ERP. Module experts provide direction and application knowledge with respect to business process design, configuration, testing, training, and implementation. *Subject Matter Experts (SMEs)* provide coordination and facilitation of communications between the project team and the organization. SMEs coordinate and prioritize functional requirements. SMEs provide leadership and functional expertise in support of the implementation with specific knowledge in one or more business processes.

The skill of module experts and SMEs is the heart of any project. A team with SMEs that understand the current environment and policies and share a willingness to make the change to a new system is critical. The module experts that understand the ERP functionality will make the system do what it is supposed to do. SMEs usually understand only a small component of the system in an ERP implementation. The SMEs will need training on the broad scope and goals of the implementation. A good test to verify an SME’s understanding of the implementation is to ask questions related to the goals periodically during the project. Do not expect implementation goals to be understood immediately. This type of communication will need to be constant throughout the project. Even though most module experts are project driven, SMEs are not. SMEs need to be trained on teamwork and the project process or methodology. Throughout the project, SMEs may question why certain activities

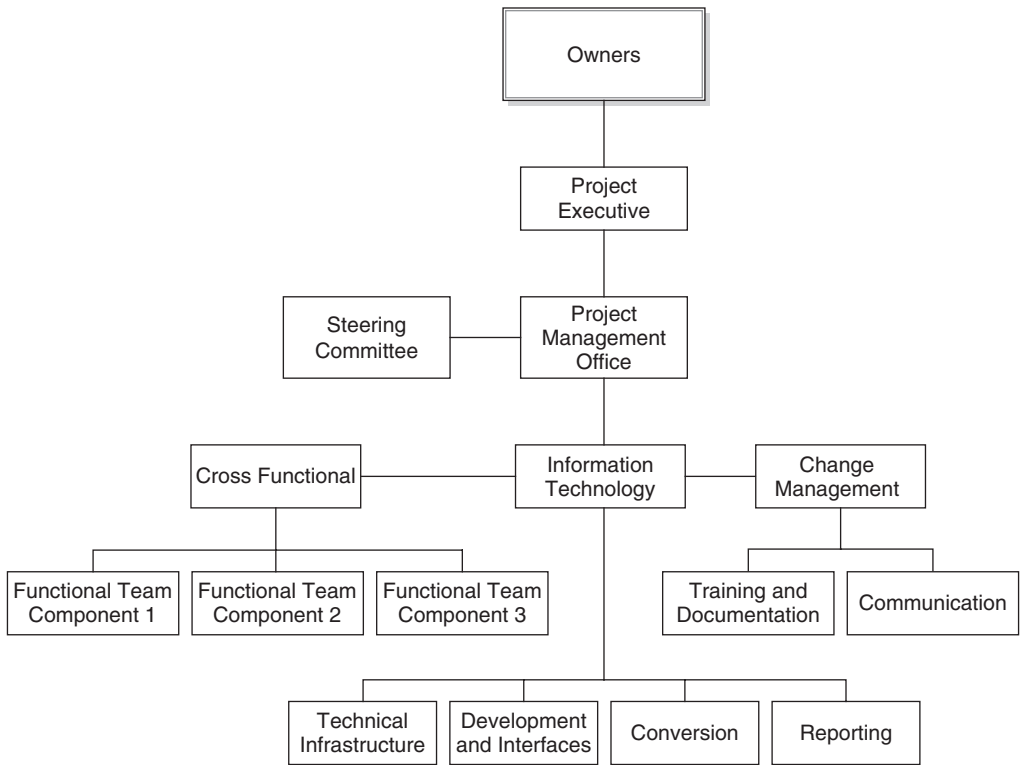


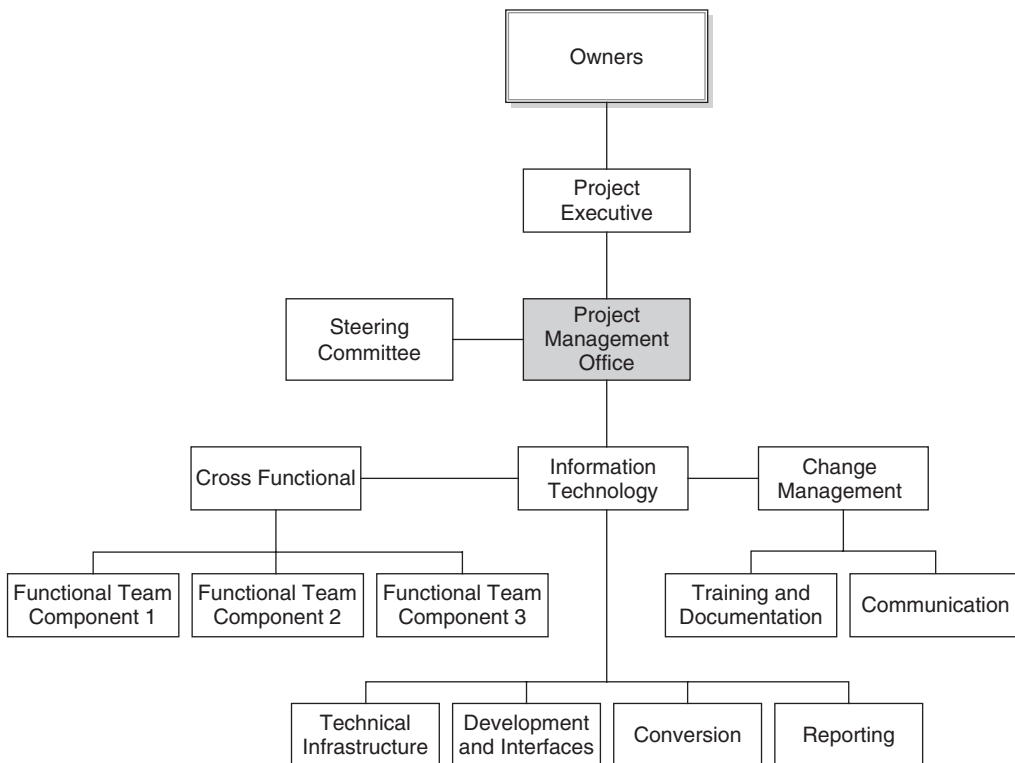
FIGURE 8-3 Sample Organization Teams.

are taking place and why some activities have not begun. SMEs will get frustrated with activities related to testing, reporting, and data conversion. It will be difficult for them to understand fully how the system is going to work until they can see their own data flow through it. The SMEs' understanding and trust of the project methodology will reduce anxiety and increase productivity.

## PROJECT LEADERSHIP

In an ERP implementation, project leadership (Figure 8-4) is not for the “faint of heart.” It is considered high risk and high reward. That being said, “perhaps the single most decisive element of ERP success or failure is the knowledge, skills, abilities, and experience of the project manager.”<sup>5</sup> Trepper added, “A successful ERP project manager is flexible, disciplined, a quick learner, a good decision maker, has ERP and business experience, has political clout with a formal education, is well liked, and finally has the ability to motivate his staff.”<sup>6</sup>

The PMO must manage the risks involved in a project implementation to be successful. Below are some examples of issues the PMO will likely need to monitor or address during an ERP implementation:



**FIGURE 8-4** Sample Organization Project Management Office.

<sup>5</sup> Trepper, C. (August 1, 1999). ERP Project Management is Key to a Successful Implementation. [www.peoplesoft-planet.com/Projectmanagement.html](http://www.peoplesoft-planet.com/Projectmanagement.html) (accessed May 1, 2005).

<sup>6</sup> Ibid.

1. *Project start-up.* As is often the case, ERP projects can take longer to start than anticipated. This can be the result of many issues including the following:
  - Hiring skilled staff can take longer than planned.
  - Bringing in professional consultants is time consuming.
  - Looking for and building out a single work location are important for the success of the project.

Even though you may want to move through this step quickly you will need to resist the temptation. Hiring the right skilled staff and finding the right skills in professional consultants is one of the most important activities a PMO can address. The abilities of technical and functional project staff, whether they are hired full-time staff or as consultants, will take a coordinated effort. Professional consultants will often need to complete an existing engagement before they can join the project. The organizing and planning for a realistic project start date will depend a lot on when the key staff are in place.

Another issue that sometimes arises with projects is finding the right space or location for the project to do its work. A single location is best. In fact, if a single location is not part of how an ERP project is implemented, it should be identified as a risk and managed closely. If the location is not set up for projects, then the build-out takes a significant amount of time. A positive working environment (i.e., one that is conducive to teamwork and communication) is paramount to a project's success. The needs of the project environment include well-lit office space for staff and a significant amount of meeting space. Do not underestimate how a working environment can assist in an ERP project implementation.

2. *Interaction or goals between technical and functional staff.* The goal of the technical staff is to implement a solid and reliable ERP system infrastructure; whereas the goal of the functional staff is to ensure that the ERP system works as defined. Functional staff will want a number of ERP system environments in which to test and validate the system. This can lead to friction between the two areas. Any changes to the system configuration or software take time and need to be planned and managed well to ensure that the functional teams can complete their work and move forward. A well-defined communication and planning grid will help to ensure that the interaction and workload between the teams are well understood and planned. The hiring of a technical lead that is well versed in both the technology and project management will also assist in bridging the technical and functional teams.
3. *Commitment of senior management for the length of the project.* There are times, especially in very difficult ERP implementations, which the commitment to the project by senior management may waver. This occurs when the system may not work as planned or when there are unanticipated changes and budget overruns. The PMO role in this area will be to manage expectations consistently and to communicate project progress openly and honestly. If there is turnover in the senior ranks, the PMO will need to orient the new management staff to the project and expectations to better ensure continued support for the project.
4. *Staff and professional consultant turnover.* Staff turnover happens in every project. The PMO should be expected to adjust to staff or consultants that leave the project. This can be addressed by a project roll-off and roll-on process, and it should be developed from the beginning. For a roll off, the knowledge transfer must take place to ensure that activities and tasks are turned over to the appropriate staff. In addition, even though the PMO is hiring replacement staff or finding another professional consultant, the workload will need to be reprioritized until the new staff begins on the project. As new staff is hired, a roll-on process



will need to occur. This roll-on process includes orienting the new staff to the teams, implementation methodology, project assumptions, and current project status, as well as their role within the project organization.

5. *Second guessing project decisions.* As with most projects, there will be second guessing of decisions made, by both team members on the project and even those outside the project. The one that can be the most damaging is the second guessing from outside the project. This can lead to more implementation issues as the project nears completion and is ready for production. Staff that are not on the project do not understand the project methodology and may not even want the new system, so they may try to undermine the implementation. The role of the PMO will be to ensure the change management (i.e., managing change) process continues to communicate and to meet with staff to ensure they are up to date on the implementation progress and major functionality decisions. While you will not be able to convince all staff, they will appreciate the effort to communicate, especially when it comes to listening to the issues.
6. *Passive–aggressive staff and users.* Any ERP implementation project should encourage open communication and build a sense of trust so that staff and users feel free to express opinions and raise issues related to the functionality of the system. For a variety of reasons, however, this is not always the case. Passive–aggressive staff or users can undermine a project’s motivation and morale. The best approach to ensure that this behavior is minimized is through accountability. The PMO must be sure that there is open and honest communication within the project and that the project team is accountable for decisions and direction. All team members must understand that project decisions and direction are made for the best of the organization, and they must abide by those decisions. Without accountability the project will become chaotic and team morale will drop.

## CRITICAL SUCCESS FACTORS

### Decision-Making Process

A well-defined decision-making process will minimize a number of issues related to scope, efficiency, and productivity throughout the project implementation cycle. The team must understand how and when decisions are made. If this process is not in place, decisions related to the project will increase scope (see next section) and may therefore not meet the overall goals agreed to during project start-up. In most projects there may be disagreement on how to use the system, what if any modifications should be made, the reports needed for Day one, and how to convert data. This is all very normal, but the project will soon break down if the decision process is not similar or the same with each issue or activity. If decisions are not communicated properly, the input and options will not be vetted with the proper groups or users and buy-in will not be achieved.

### Project Scope

The project manager has many responsibilities. One of the most critical is the management of project scope. “Scope defines what needs to be delivered by the project, and a changing scope means the project will have difficulty in achieving project goals.”<sup>7</sup> The PMO works through the business

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<sup>7</sup> Aniceto, J. (March 2003). Project Management—Managing Scope Creep. [www.suite101.com/article.cfm/17106/99319](http://www.suite101.com/article.cfm/17106/99319) (accessed May 1, 2005).

processes that will be included in the implementation based on the projects goals. These goals have a direct effect on which software modules will be implemented and the number of business units that will participate in this implementation. Scope creep is defined as constant changes to the parameters outlined in the original project goals. It was stated earlier that one of the roles of project management is to make sure the project meets its goals in relation to cost, quality, and time. Scope creep has a detrimental effect on meeting this objective. To prevent scope creep, the project manager must ensure that the parameters of the project are outlined in the business case, a project charter, or a mission statement. There is always some change in scope as a project progresses, but the project manager must make sure to have a formal process in place in order to manage that change effort. It is not unusual for organizations to implement a change control board, which includes users and senior management to address these instances.

### Teamwork

The teamwork concept cannot be emphasized enough (Table 8-1). In most ERP implementations, project teams are assembled by bringing together staff from the existing organization, new hires, and possible external consultants. Teamwork does not just happen without some effort in training and team building. Each team will have its own set of dynamics based on the knowledge and personalities of the people involved. It takes savvy project managers and project leads to develop and build teams to address the many issues that will confront the teams as the project moves forward. If teamwork is not incorporated into a project, it will be much more difficult to keep on track, and it will likely cost more in resources.

Table 8-1 presents the result of a survey response from IS professionals in Australia and New Zealand. Respondents were asked to rate the importance of differing business skills by selecting a value from 1 to 5, with one representing very low and a five representing very high. They were also asked to indicate their level of expertise in relation to these skills. Table 8-1 shows the means and standard deviations for the importance of business skill of the cohort.

*Teamwork* scored the highest, with an approval with a very tight standard deviation. Solutions, deadlines, and projects scored equally, placing in second, followed by change management. The least-favored business skill was the need to have sales and marketing skills. This skill also showed a high standard deviation. A knowledge of business politics was not favored and was ranked 9 out of 10.

**TABLE 8-1 Business Skills Importance to E-Business/E-Commerce (*n* = 27)**

<b>Skills</b>	<b>Mean Rating</b>	<b>Standard Deviation</b>	<b>Respondent Level</b>
Teamwork	4.6	0.9	4.5
Deliver Business Solutions	4.3	0.7	3.1
Meet Deadlines	4.3	0.8	4.0
Project Management	4.3	1.1	3.2
Change Management	4.2	1.0	3.9
Client Consulting	4.1	0.9	3.6
Personal Communications	4.1	1.0	3.4
Client Negotiating	3.9	1.1	3.3
Internal Business Politics	3.4	1.2	3.3
Sales and Marketing Skills	2.8	1.5	2.4

The respondents rated their current skill level in the areas of personal communications and project management considerably below the level that they believed to be important to industry.<sup>8</sup>

## Change Management

Change management is another critical factor that must be addressed by the project manager (i.e., managing change). Communication and training are the keys to a successful change management effort. It is normal for people to resist change and have a fear of the unknown. The project manager must have the skills to empathize with the affected employees, realizing many of them might have been doing their job in the same fashion for many years. It is up to the project manager to communicate the importance and significance of the project to the entire organization, top to bottom. There is no better way to calm a user's fears than to implement an aggressive training program. "Nothing eases a team's apprehension when starting a new project better than knowing they will be trained in what they have to do."<sup>9</sup> It pays to get these same users in the fold early. The project manager should make sure that their issues and needs are taken into consideration along with those of the organization. Let the team share in the ownership of the system, and it will provide for a smoother changeover.

## Implementation Team and Executive Team

The program manager and the project manager are critical to a successful ERP implementation, but there are other groups that are also critical to that success. One of those groups is the implementation team. There are typically three options in choosing an implementation team: the internal IT organization, consulting organizations, and the package software vendors' client professional service group.<sup>10</sup> A critical element in choosing what combination of the three will be used largely depends on what type of resources the organization has within its own walls and how quickly the implementation must take place. It is a common edict in today's fast-paced environment that the sooner a solution is rolled out to a business, the faster a company will begin to see a return on investment.<sup>11</sup> It is unusual to find internal IT personnel who are up to speed on all the intricacies of the ERP, so relying solely on internal IT personnel will slow down the implementation process. Outside consultants have the experience of doing prior implementations at other organizations working in their favor, so they understand what has and has not worked in those other implementations. They are unbiased because they neither work for the software package vendor nor for the organization implementing the ERP solution. Finally, the vendor's client professionals bridge the gap between the internal IT personnel and the outside consultants. They have all the up-to-date information on the software package and can help explain the software's latest enhancements. It is essential that consultants are well integrated with the internal IT personnel in order to realize the benefits of knowledge transfer. This ensures that once the project is over and the consultants are gone, the internal IT personnel have absorbed all the necessary information to operate independently.

What role does the executive management branch of the organization play in a successful ERP implementation? Executive management support and commitment throughout the project is essential. Executive management can also assist with the change management process, especially

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<sup>8</sup> Hawking, P., and Stein, A. E-skills: Proceedings of the Thirty-Sixth Hawaii International Conference on System Sciences (HICSS'03). *The Next hurdle for ERP implementations, School of Information Systems*. Melbourne, VIC: Victoria University of Technology.

<sup>9</sup> Strub, J. A. (February 2003). Top 10 Reasons for Having a Project Kickoff. [www.technology-evaluation.com/Research/ResearchHighlights/ERP/2003/02/research\\_notes/prn\\_MI\\_ER\\_PJ\\_02\\_24\\_03\\_1.asp](http://www.technology-evaluation.com/Research/ResearchHighlights/ERP/2003/02/research_notes/prn_MI_ER_PJ_02_24_03_1.asp) (accessed May 1, 2005).

<sup>10</sup> Bhuta, V. (April 30, 2001). Eight Mantras to a Successful Software Implementation. [www.gantthead.com/article.cfm?ID=18833](http://www.gantthead.com/article.cfm?ID=18833) (accessed May 1, 2005).

<sup>11</sup> Ibid.

**TABLE 8-2 Executive Sponsor Speaks to the Organization**

<b>1. Impact of the product on the business</b>	All departments were represented
Cost savings	Vendors considered
Cost avoidance	Preparation of the RFP
Efficiencies to be gained	Site visitations and demos
Competitive advantage	<b>3. Long-Term Impact of a Successful Project</b>
<b>2. Description of Selection Process</b>	Sustainability
Who was on the selection committee	Growth

communications that will be needed with the new system. Change management helps employees feel secure about the changes that will come as a result of the implementation. It is very important to have the chief executive of the organization speak at the project kickoff meeting to explain in his or her own words why this project is so important, what the project means to the organization, and how their business goals will be met because of this implementation. Items that might be covered by the executive are outlined in Table 8-2.<sup>12</sup>

**Managing Scope Creep**

A well-thought-out process to manage changes to scope is critical to a project’s success. The team can do everything in its power to understand the functionality of an ERP system; however, seeing it work in the company’s environment is vital. Project plans and deadlines are made early on in the project planning without fully realizing the detail of how the ERP functions will meet the company goals and needs. For example, the functional teams begin evaluating the ERP functionality in the test environment after the project scope is approved. If a key element of the functionality does not work well during this process, there may be a need to make changes to the original scope. These new changes must then be built into the implementation. “Change Control” is managing these changes through a change process and governance. There must be a clear understanding around the decision-making process. When changes are made in the scope of the project, the options, costs, and time frame must be documented for the project to evaluate and decide a direction. Changes in project scope or new functionality are often addressed through the research and development of a white paper. A “white paper” consists of a description of the issue or new functionality, including the options available with advantages and disadvantages. A white paper should also list the implications to the project, including a time frame and budget considerations and a recommendation. If change control is not enforced, “scope creep” can quickly get out of control, leading to missed deadlines and project budget overruns.

**IMPLICATIONS FOR MANAGEMENT**

*The success or failure of a project often rests with the skills and abilities of the PMO, project staff continuity, and a well-defined communications process.* Well-managed projects are those where the scope is well understood and the project team is motivated to see the project through to Go-live. On the other hand, many projects fail due to a lack of open and honest communications and staff continuity throughout the project.

<sup>12</sup> Strub. Top 10 Reasons for Having a Project Kickoff.

**BOX 8-1 Sample Change Control Document**

Date:

Issue Number: xxxx

Description of issue or new functionality:

Option 1:

- Description of option
- Technical implications
- User implications
- Advantages
- Disadvantages
- Amount of additional functional and technical staff time
- Cost
- Additional project time frame

Option n:

- Description of option
- Technical implications
- User implications
- Advantages
- Disadvantages
- Amount of additional function and technical staff time
- Cost
- Additional project time frame

Recommendation

*The PMO must monitor a number of activities and issues throughout the length of the implementation.* Hiring and selecting skilled and competent staff from the beginning will ensure that the Go-live is smooth and the system is sustainable. An experienced and skilled PMO will know how to address implementation issues and activities. ERP implementations require teamwork and a high level of trust. This is accomplished by open and honest communication within and across teams. To accomplish this, meetings and discussions must be well organized and facilitated to ensure that everyone gets a chance to express ideas, thoughts, and opinions. Team members must be very aware that not all their issues will be accepted, but that they will be heard and considered.

*The PMO needs to be sure that management is informed and up to date on the project status.* This will ensure that the project stays on schedule and within budget (i.e., that teams are working together and moving through the implementation methodology). Managing senior management's expectations is an important activity for the PMO. Senior management must remain committed to the project through every phase, and they must show their commitment. In addition to regular meetings with management on the implementation status, management must also be informed as to how the system will function. This should be presented at a high level, but not a detailed level. ERP projects often take a few years to implement, and even though management is informed as to the benefits of a new ERP, they often forget some of the key benefits as the project team moves through the implementation phases. The PMO will know if they have communicated the benefits and expectations well enough when management starts to talk, on a regular basis, about how the system will work for the organization.

**Summary**

- Project management and the PMO must identify and monitor the critical success factors of an ERP implementation. Several factors were identified in this chapter as it relates to scope, teamwork, processes, and communication. Each project will have these as it moves forward.
- The PMO must address a number of project priorities daily, but it will need to continue to focus on the business goals and to