Understanding and Mitigating IT Project Risks

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Technology projects can present organizational challenges, and the associated risk is one of the finance officer’s primary concerns about such projects. At a minimum, finance officers should understand the organizational risks presented. However, it is often in the best interest of the organization to have its finance officer play a larger role — more than just a risk management role — in the success of a technology project.

Risks are inherent in essentially all technology projects. Beyond risk management, though, some projects directly affect the operations of the finance function. Examples such as financial systems, enterprise resource planning (ERP) projects, and the internal controls built into business process systems (e.g., recreation registration, development permit administration) will have a direct impact on the business processes of the finance function.

This article focuses on strategies and tactics for mitigating the more subtle risks to the success of a technology project in achieving its intended results for your organization. It will focus on examining ways the organizational finance officer can contribute to the success of such projects.

**IDENTIFYING RISK**

Three primary areas of risk accompany any IT project: planning risk, technology-related risk, and people risk. Planning risks are all related to project management exercises. Examples include the expertise of the proposed project manager, the current and future political landscape, the reliability of the project budget and funding, the potential for process reengineering, managing user expectations, how well change is managed, and scope creep. Technology-related risks relate to the hardware, software, and network infrastructure that is required in an IT project. Examples of risk in the technology area include new hardware purchase requirements, virtualization possibilities, disaster recovery, ease of system use, technology support, ongoing system maintenance, and network bandwidth requirements. Finally, people-related risks are a major component of any technology implementation. People risks include internal versus external project staffing resources, identifying subject matter experts, and competing projects that could affect implementation staff time. While these are three distinct risk areas, they are not mutually exclusive (as shown in Exhibit 1).

### Exhibit 1: Examples of Risks Associated with an IT Project

- **Planning Risks**
  - Police
  - Budget cuts
  - Process changes
  - Vendor management
  - Scope creep
- **Technology Risks**
  - Hardware
  - Software
  - Network speed
  - Disaster recovery
- **People Risks**
  - Internal v external resources
  - User acceptance
  - Competing staff priorities

Impact of software customization on future upgrades

Ability for existing staff to provide future technical support

Organizational change management
**LEADERSHIP**

A key to success in any significant undertaking is strong and consistent leadership, and this is frequently a role of the organization’s finance officer. Problems in technology projects often come from leadership gaps such as a lack of clear support within the organization, expansion of (or lack of control over) the scope once the concept is commenced, or a lack of focus on deadlines. Many IT risks can be mitigated at the outset by clearly assigning the leadership responsibility (often called project sponsorship) to someone who possesses the skills and the organizational role to direct the project to a successful conclusion.

The project sponsor will essentially be responsible for realizing the benefits that led the organization to take on the effort in the first place. That leader will need the vision to realize how a well-executed project will transform the organization and then lead the project toward that vision. The sponsor must also be able to identify any risk factors associated with the project that could potentially derail the effort. This is a different role from that of a project manager. The sponsor will help steer the project toward accomplishing its purpose. A sponsor is often needed to secure the resources (both budget and personnel time) that will be needed in order to successfully implement such a project. This often spans organizational boundaries and thus requires someone with the authority and position within the organization to garner such support. The sponsor will also be responsible for solving the problems that can arise with a complex technology project (see Exhibit 2).

**PROJECT BUY-IN**

One key to success is for the staff who will be asked to use the new system to understand it and buy in to the concept. One of the common complaints when a project does not meet expectations is that the people the project was intended to help did not support it. There are countless anecdotal stories in which employees who are intended to use the new system go to great lengths to cause the new technology to function just like the old technology it replaced, undermining the intended benefits.

A key to gaining staff buy-in is to involve those who will use the technology in developing a business case for the improvements. This is best accomplished by communicating with those staff members to explore their frustrations and ideas for improvement. Some organizations start with a process improvement effort which concludes that new technologies will be a step toward closing the process gaps. Making a connection between the staff input and the benefits of technological improvements can help illustrate how the project will help those directly involved. These are the people who will ultimately make the project succeed, and ignoring their input risks alienating them from the outset.

The discussion that arises as a result of employee input can then inform the formal acquisition process. There will be other bureaucratic requirements, but to demonstrate that the process has been responsive to staff needs, it is important to show how the staff input was incorporated into the bidding requirements. Doing so will also likely help justify the funding of the project.

The administrative and policy leadership within the organization will also need to buy in to the project. The discussion with staff will inform the business case, which is often a first step in the budget process, along with other processes needed to acquire significant new technologies. Your technology project may be competing for resources — budget, staff, energy — that are important to other leaders within the orga-
nization. It can be important for those leaders to understand the benefits of the project so they can be supportive when asked, or at least not work against the project.

CLEAR UNDERSTANDING OF PURPOSE

The business case for the project will document the purpose of the investment, explaining the organizational benefits (e.g., monetary benefits, efficiencies, process improvements, better end products). Assessing the degree to which your project provides these benefits will help you determine the scope of the project.

For example, you might decide to implement a new financial system. In the course of the assessment, it might become clear that a new payroll and human resources system could result in substantial additional benefits, so you decide to proceed with a companion payroll and human resources system, as well. This investigation might reveal that capturing employee time by using an Internet tool or similar approach would also add ancillary benefits. And in exploring these issues, you might learn that your fire department has challenges in scheduling the shift personnel in a way that meets operational needs and complies with the union contract, and a companion effort to the payroll project could offer some benefits here. And so on. At some point, the costs of expanding the project might either exceed the benefits or the additional scope might add enough risk that the best decision is to scale back to something closer to the original purpose.

A clear statement of purpose can be an excellent tool for engaging a wide variety of stakeholders. Carefully managed, a process to develop the project’s purpose can result in a clear guidepost or reference point to help the leaders of the project. Adding scope often sounds like a good idea, and the project manager and project sponsor can use the purpose statement to evaluate just how strong the relationship is between the latest idea and the original purpose for the project.

THE CRUCIAL ROLE OF STAKEHOLDERS

The project team will either make or break the project. A strong team is often made up of the functional managers or supervisors who are responsible for the processes that will be affected most by the new technology. They have the most to gain from a good project — and the most to lose from a bad one.

Efficient management of the project requires a core team, but a broader team is often important to carry key messages, act as a sounding board, and communicate about how the organization perceives the project. Therefore, you also need to create a team of project stakeholders. Keep in mind that the technology aspects of the project are important, and there should be a technical resource person on the team, but your project is about applying technology to a business need. Your team should be primarily made up of and led by the business process owners and participants.

The core team should be very involved in helping the project manager oversee the many details involved in keeping a large technology project on task. This also provides redundancy, which is important because the loss of a key player is often the cause of a project failure. The team can provide important feedback to the project manager and sponsors. Keep the core project team up to date on all aspects of the project.

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including project risks, impacts, and solutions — many core project teams log all the potential project risks, along with possible solutions (see Exhibit 3). Being open to feedback from your team members is a key to success — both the good and constructive feedback and the negative feedback that does not always appear to add value, on the surface. It will be important to understand and validate the messages you receive about the status of the project and its reception by those it is intended to help.

COMMUNICATE, COMMUNICATE, COMMUNICATE

As the saying goes, you cannot over-communicate. Keeping the people who are involved on the project team up to date on the issues, progress, plans, and other aspects of the project will allow them to remain supportive. If the team members seem to be losing touch with the project, don’t know how the next problem is being addressed, or feel disenfranchised, the support from this very important group of stakeholders can erode. Without such support, you lose a voice in the organization that will answer the critics in water-cooler conversations, and you might lose the value of their objective feedback as well. In this situation, you risk that staff will not be willing to use the new technology as intended and will stick to the old ways instead (e.g., file drawers full of duplicate invoices and other elements of shadow systems).

The broader organization needs to be able to believe that the project will be successful. Let them know why you are pursuing it, what the risks are, how staff members can help, what the timeline is, and how employees can provide their own feedback to the project team. You will attempt to get the thought leaders and the doers in the organization directly involved in the project team, but you should not overlook the value provided by others, as well.

STRONG PARTNERSHIPS

The project itself is made up of technologies designed to address a business problem. The software often consists of several “layers,” and adding in an operating system, client systems, database, and various application layers makes the software environment more complicated than ever. As a result, numerous business partners are usually involved in the success of your project. The procurement process should be designed to put the organization in the position of selecting the best possible team of business partners and then providing incentives for those partners to succeed.

By their nature, technology projects are often a mixture of trusted and known technologies and newer technologies. The database might be a tool that is well established as being stable and reliable, but an application layer might be brand new, forcing you to rely on the track record of the business partner bringing this new technology to the project.
Selecting the right mix of technologies and the right partners to develop and implement them can be the difference between a significant success and a significant failure.

Invest the time and effort needed to get to know the partners you are trusting your project to. If the technology is well tested in the marketplace, you can be fairly comfortable that it will perform as promised — although some due diligence might still be in order (finding out if it will work with this operating system or with this type of network, for instance). If the technology is new and less tested in the marketplace, some investigation can still provide a level of assurance. You will have many more questions about the team behind the newer technology than you would about the more established product. You will also have more questions about the effort they have invested in assuring its success. This technology team wants a successful project, as well, so ask how you can be assured of your mutual success by trusting in them to provide a reliable technology tool.

Contracts between the partners tend to be written to thoroughly document what happens when projects don’t go well. There are likely to be indemnifications and hold harmless clauses throughout the document. While this approach is necessary, it also runs counter to the goal of focusing on ways to achieve mutual success. Don’t let the contract define the relationship. Meet with the partners and agree together about how each party will benefit from a great project outcome and what each party is willing to do to see that outcome realized.

**CONCLUSIONS**

While large technology projects are complicated and time consuming, they allow your organization to realize the huge potential of modern technological advances. They present opportunities for the organization as well as risks. Plan for success and prepare strategies for how to deal with the challenges that will likely be part of the journey to your successful outcome. By leading such a project, the finance officer can mitigate organizational risk, realize business process improvements, and perhaps help shape the organization for the future.

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