The Functional Manager's Role in IT Project Management

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Abstract

In a matrix information technology organization, the functional manager plays a key role in project management, making crucial contributions to processes such as estimating time and cost, identifying risks, and managing teams. In some processes the functional manager even acts as agent or proxy for the project manager. It behooves the project manager to understand and appreciate the functional manager's role. Conversely, the functional manager should be trained in project management concepts. Mutual understanding, respect, and honesty between the people in these roles will help build momentum toward project success.

In a certain kind of large company with an extensive information technology organization, the functional manager plays a key role in project management. Especially in a matrix organization, where the functional manager retains considerable authority over project team members, the functional manager is responsible for many project management processes. Project success will depend on the functional manager and the project manager cooperating, communicating, and understanding each other's role.

An Imaginary Company

In this kind of organization the functional manager typically leads a team responsible for creating and maintaining one or more applications that serve an operational area and its business functions. To draw from an imaginary example, Culloden Healthcare (a fictitious health insurance company) has an operational unit responsible for customer eligibility and enrollment functions. A functional manager—call her Lara—leads a team supporting the eligibility and enrollment business applications.

Lara's team includes an architect, business and systems analysts, programmers, and system testers. Some years ago the team developed both the graphical user interfaces and the back-end applications that handle database transactions for eligibility and enrollment. As business projects are approved and funded, Lara's team is responsible for assessing how the projects will impact the team's application suite, estimating work effort and cost to make the corresponding system changes, and sometimes creating new applications to meet the needs of the business. The team persists from project to project—unlike a dedicated team that's brought together for agile development in a particular project and then disbanded.

As functional manager Lara is responsible not only for the team's application development work but also for developing the team itself. She mentors and coaches team members, evaluates their performance, elicits their best efforts, and challenges them to grow.

Functional Manager Processes

The functional manager has a distinctive view of the project life cycle but deals with the same process groups as the project manager: initiating, planning, executing, monitoring and controlling, and closing. The functional manager's specific processes may differ from those of the project manager. For

example, Lara initiates work on a project by learning about its possible impacts to her applications after the project is already under way. For the project manager the initiating phase starts much earlier with documenting the original business need for the project, identifying stakeholders, etc.

Other processes are the same for the functional manager and the project manager; in fact the functional manager will act as the project manager's agent or proxy in some processes. I've extracted a subjective list of such processes from *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*—Fifth Edition (PMI, 2013) and arranged them by process group in Table 1. Of all the project management processes, these are a subset in which the functional manager plays a crucial role.

The Functional Manager's Challenge

The functional manager may have to deal with several projects at once. To continue our imaginary but realistic example, let's say there are five projects that impact Lara's applications in progress concurrently at Culloden Healthcare. One is a corporate rebranding initiative involving a marketing campaign with a new mission statement and a new company logo to appear on all customer ID cards at the time of reissue. Lara owns the application that produces ID cards, so she's impacted.

Another project will implement a new product offering with a network of healthcare providers selected on the basis of their record of value and quality in patient care. Lara's application that supports customer enrollment in specific benefit options will have changes for this project.

Further, three aspects of the federal Patient Protection and Affordable Care Act (PPACA) affect Lara's eligibility and enrollment applications: the requirement for insurers to provide 10 essential health benefits as defined by the law, the need to receive enrollment feeds from the new public healthcare exchanges, and the contraceptive service exemption for religious nonprofit organizations. Each of these three PPACA efforts is substantial enough that Culloden Healthcare has defined it as a separate project with its own project manager.

The company has a highly structured schedule of monthly software releases and, as it happens, all five of the projects affecting Lara's domain have been targeted for the same release. This is the core of the functional manager's challenge: to deliver work for multiple projects at the same time with high quality, usually under aggressive schedules.

Similarly, a project manager will need to deal with multiple functional teams at the same time. For example, if I'm the project manager for the rebranding project at Culloden Healthcare, I'll need to work with Lara for ID card impacts and with several other functional managers for impacts to marketing materials, the corporate website, and any area where the company logo and mission statement appear. It behooves me to understand the functional manager's process. Doing so will improve my communications with all the functional managers, help gain their cooperation in the project, and potentially make a difference in whether my project succeeds or fails.

Estimating

Let's consider the estimating process. At Culloden Healthcare, functional teams make initial estimates of work effort and cost before a project is targeted for a specific monthly release. Naturally the teams tend to assess each project in isolation, as if it were the only project the team would be working on at a given time. The estimate will include costs for tasks such as packaging and migrating a program through the various test environments (unit, system, integration, and user acceptance), working with the data modeler and database administrator on table changes, and planning application rollout with the software distribution team.

But when several projects are slated for the same release (such as Lara's five concurrent projects described above), then economies may be realized during development that will make the actual delivery cost considerably lower than the team's original estimate. Several projects may utilize the same batch program, the same visual object in a graphical user interface, or the same database table. This means the

Table 1. Key Functional Manager Processes

Planning	Executing	Monitoring and Controlling
- Estimate activity resources	- Direct and manage project work	- Monitor and control project work
- Estimate activity durations	- Acquire project team	- Perform integrated change control
- Estimate costs	- Develop project team	- Control scope
- Develop schedule	- Manage project team	- Control schedule
- Identify risks		- Control quality
- Plan risk responses		

packaging and migration of a unit of code may need to be done only once to handle changes for several projects, while the test plan for one module may likewise include changes for multiple projects, and database changes for several projects may be modeled and implemented in a single pass rather than separately for each project.

As project manager, if I'm sensitive to Lara's process and the realities of her position, I might carefully choose the right time and ask her to re-estimate the effort and cost of handling my project's impacts on her applications. The resulting projected cost savings from economies like those above, multiplied times the number of functional teams on my project that are reaping similar economies, may significantly lower my project's proposed budget. Conceivably this could make the difference between getting final approved funding for my project or having it canceled in midstream as not justifying the company's investment.

Identifying Risks

During the project planning phase, the functional manager has a key role in identifying risks at the functional level and planning risk responses. In the PPACA healthcare exchanges project, for instance, Lara may have identified a risk related to the vendor responsible for transmitting customer enrollment data from the government's exchange system to Culloden Healthcare's enrollment system. The risk is that the vendor may not define details of the transmission file layout in time for Lara's team to meet project milestone dates. During execution, as project manager I will rely on Lara to alert me when risks to delivery of her team's work are realized so I can ensure the planned responses are triggered. Opportunities may arise, too, as when a designer on Lara's team discovers that a certain leg of the system under development for the rebranding project is not needed after all. As it turns out, the process to feed customer data to a hard-copy letter-printing application is being retired in favor of an online version.

Team Leading

The functional manager plays a crucial role in the project team processes. In a small, focused project using an agile approach to software development, the project manager may be an immediate part of the functional team. But in large-scale projects with many geographically dispersed functional teams, the project team is virtual. In this case the functional manager identifies or acquires members of the delivery team, ensures they get the necessary training to execute project requirements, and manages team performance.

Suppose the architecture of a project at Culloden Healthcare requires Lara's team to build a Java interface between an enrollment application and a customer-facing website—but Lara has no Java programmers on her team. She will first reach out to peer functional managers within her organization to explore borrowing or trading a resource with Java expertise from another team. If she's unsuccessful in that effort, as the project manager I may be able to help negotiate such a swap on her behalf, calling on my contacts throughout the larger virtual team.

Lara may also exert less obvious influences on the project via her team. A functional manager's overall opinion of a project—and possibly of a project manager—can be communicated to her team in subtle ways. Critical remarks made by Lara in a team meeting about the health of a project, or even a skeptical tone of her voice in an apparently innocuous comment, can dampen her team's enthusiasm for the work and ultimately contribute to delivery delays. As the project manager I will want to maintain a personal connection with Lara, even when I'm not collocated with her team, to address her concerns openly before they can become a drag on the project.

Conclusion

Especially in a large corporation, as a project manager I may be physically distant from the functional teams involved in my project. Understanding the functional manager's process and cadence of activities can help me bind the various teams together and create goodwill, making for a more effective project team as a whole. And because the functional manager is crucial to the success of the project, she can be most effective in her role as collaborator with the project manager if she's trained in project management concepts. Mutual understanding of each other's role and a commitment to treating each other with honesty and respect will go a long way toward bringing the project home on time and within budget.

Reference

Project Management Institute. (2013). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*—Fifth Edition. Newtown Square, PA: Author.

About the Author

Gordon Swift's 30-year IT career has included work for Cigna, Aetna, The Hartford Insurance Group, Computer Sciences Corporation, Insurance Services Office, and Merrill Lynch. He has held a variety of positions, including project manager, functional manager, systems analyst, test lead, application programmer, and database administrator. He also plays violin and fiddle and holds a doctorate in ethnomusicology from Wesleyan University in Middletown, CT.