

# 9

## Costs and Procurement

### Overview

The cost portion of the chapter aligns with chapter 7 of the PMBOK and 9% of the CAPM questions come from this knowledge area. The content connects to the Planning and Monitoring & Controlling category of the PMP questions. The procurement portion of the chapter deals with Chapter 12 of the PMBOK and 9% of the CAPM questions come from this knowledge area. The content connects to the Planning, Executing, Monitoring & Controlling and closure category of the PMP questions.

An important part of a project manager's job is managing money. All types of organizations must manage their money well in order to fulfill their mission, including not-for-profit and government organizations. The tools and methods used to manage money on a project vary depending on the phase and complexity of the project. This chapter first describes the methods used to estimate the cost of a project, create a budget, and manage the cost of activities while the project is being executed. It then covers a major component of cost management—the procurement process.

To achieve the objectives of the project, the management team often needs to look outside the internal organization for additional help. The process of obtaining goods and services from providers who are

outside of the organization is called **procurement**. We will discuss ways of selecting the work that will be procured and the different methods and processes for procuring the equipment, materials, and services for the project.

The procurement effort on projects varies widely and depends on the type of project. Often the client organization will provide procurement services on less complex projects. In this case, the project team identifies the materials, equipment, and supplies needed by the project and provides product specifications and a detailed delivery schedule. When the procurement department of the parent organization provides procurement services, a liaison from the project can help the procurement team better understand the unique requirements of the project and the time-sensitive or critical items of the project schedule.

On larger, more complex projects, personnel are dedicated to procuring and managing the equipment, supplies, and materials needed by the project. Because of the temporary nature of projects, equipment, supplies, and materials are procured as part of the product of the project or for the execution of the project. For example, workbook materials might be procured for the product of the project, and the computers and software might be equipment procured for the execution of the project work. At the end of the project, equipment bought or rented for the execution of the work of the project are sold, returned to rental organizations, or disposed of some other way.

More complex projects will typically procure through different procurement and management methods. **Commodities** are common products that are purchased based on the lowest bid. Commodities include items like concrete for building projects, office supplies, or even lab equipment for a research project. The second type of procurement includes products that are specified for the project. **Vendors** who can produce these products bid for a contract. The awarding of a contract can include price, ability to meet the project

schedule, the fit for purpose of the product, and other considerations important to the project. Equipment especially designed and built for a research project is an example of what might be provided by a project vendor. These vendors' performances become important parts of the project, and the project manager assigns resources to coordinate the work and schedule of the vendor.

The third procurement approach is the development of one or more partners. A public relations firm that is awarded the advertising contract for a major project and a research firm that is conducting critical subparts of the research are examples of potential project partners. A partner contributes to and is integrated into the execution plan. Partners perform best when they share the project vision of success and are emotionally invested in the project. The project management team builds and implements a project procurement plan that recognizes the most efficient and effective procurement approach to support the project.

## **Designers Share Their Experiences**

**Dr. Andy Gibbons - Instructional Psychology and  
Technology - BYU**



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Well project budgets are scary. Because when you are out of money, you are out of money. Your goal is to come in under budget if you possibly can. You know it's funny, there is a concept, I was working on this project, training submarine finding helicopter pilots and sensor operators so we had two little mini-projects going on. Well they weren't mini-projects they were pretty good-sized projects. We had a staff of about 25 people. We had to pay them all. We had to bring them on at the right time, and we had to put them off of the project at the right time. Because if we didn't then, they would bill against the project and we would use up funds that we didn't have. So we had to know when a certain set of jobs was going to be done. One of our artists was a cartoonist. We had to know when he came on the project and when he left the project. We had to make sure he was busy the whole time. So sometimes that comes into conflict with the production schedule, and you end up having people being paid longer than you

expected. Boy, budget. There is a concept called designed costs. I think it's an important concept for instructional designers to understand. It means you only have a certain amount of time, and a certain amount of money to pay people, and so you make your design to fit those resources. There is no project that you get on where you couldn't design something that is like the Taj Mahal, ornate and gilded and beautiful and pure marble and all that kind of stuff. But you know, every project can't be the Taj Mahal. You can't afford it, it takes too long, too many people. And so you have to make your design fit what you have. And people say that's giving up your principles, isn't there something wrong about that, isn't there something unethical about that. And the answer is no. When your client contracts with you for a certain amount of money, that's what they want to pay you. And you can go back to your client with a change order, and that's kind of an official thing, a change order, saying, now if you want this extra feature this is how much it's going to cost you. Because one of the things that happens as you design for a client, all of a sudden they start getting the picture, you create these wonderful clouds of vision in their mind and they say, "That's so cool! We could do this. And we could do this..." You excite them. And they start imagining, "Wow we could create this, such a cool thing". Well your budget said Volkswagen, it didn't say Cadillac. It said Volkswagen. So if you want a Cadillac we're going to have to re-write some of the contract to say Cadillac in it. So budgets are scary.

## **Heather Bryce - Independent Studies - BYU**



[Watch on YouTube https://edtechbooks.org/-ycx](https://edtechbooks.org/-ycx) Well, we didn't manage our budget very well for this course. Because of the meetings, the excessive meetings, it, the cost jumped up dramatically. And a lot of the things that we made decisions on, the instructional designer. You know, Flash takes a long time, video takes a long time, the recording, the post process, the pre-process. Those are costly things. So you have to kind of weigh those things out when you create a course. But, with an art course it would not be a very good course, instructionally, if you didn't have any of those things in it, if it was just straight reading. In the end, we spent a lot more money than we planned, but it made for such a rich course. It's a fantastic drawing course. In the triangle of project management, when you manage your time and your cost and your quality, the quality of this course is incredible. The time, we kept our time on time. What we gave up was, we gave up cost for quality in this example. And the award that we received, we all feel like it was worth it, but of course we wouldn't be in business if we did

that with every course. So you have to weigh it out. What we have to manage the course budget, is we do have a program. Our same program that we use to manage our tasks, and everyone records their hours that they spend on each task. And so it tabulates how much money we're spending on the budget so you can look at the course at any time. I just, what I do is, and the instructional designers we check on that throughout. So each phase of the project it will tell you how much money. And so, how it's supposed to work is when you see that you are close, it will kind of go red, and it will show you that you're using up your budget money for that processor, so you better hurry it out. So, how ideally it works is you cut things out if you have to stay within your budget, but like I said, that was probably a project failure as far as budget went for this course.

**Dr. Larry Seawright - Center for Teaching and Learning - BYU**

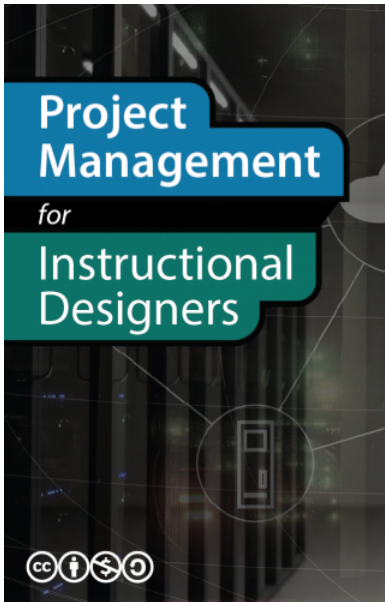


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So in building the BYU Learning Suite, we're at the Center for Teaching and Learning. So, our budget is pretty constrained. And we have lots of stuff that we're doing. So we were kind of given this much money to do things, and we said we can only do this much of the project and you want this much done. So they said okay, we'll give you this much. And we just had to keep going back, this much, this much, this much. So, you know, budget management is one of the critical things that any project manager has to do. Where you're a smaller entity within a larger organization, and the larger organization is the one asking you to do something at least you're in a good position. You can go back and ask for more money. Is this really important to you? Then give us some more money. Is this really important to you? Then give us some more money. And that's kind of how we've been having to do this. They shortened the time frame that we needed to do the project in by quite a bit. So that compressed the development cycle.



The budget went from this to this. Simply because we had to hire a lot more people to get it done that fast. So you know, it's a difficult project management triangle. You know, it's time, scope and money. If they reduce the time, you've got to spend more money, or reduce the scope. And we actually had to do both. We couldn't get as much done in that amount of time. But we tried to get more done by hiring more people. So you know, it's the old trade off.



Wiley, D. et al. (2018). Project Management for Instructional Designers. EdTech Books.  
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