

The Relationship of Resources and the Project Budget

Margo Kirwin, CPLP, PMP, PMI-ACP, PMI-PBA
RMC Content and Instructional Design Consultant

Projects can accomplish nothing without resources. Resources are not free, and they must be captured in the project budget. But are all resources captured in the project budget, all the time? Let's take a look at project resources and their relationships to other critical areas a project manager orchestrates on a project.

To start, consider it "common sense" that the kinds of resources you *may* find in a project budget are:

- **Time.** This relates to the work the team and contracted people do on the project. Leased equipment may also be procured on a time-phased basis.
- **Equipment.** This is physical or material resources, which the performing organization already owns or must contract for through procurement.
- **Supplies.** These material resources are stocked in the performing organization or are bought explicitly for the project.
- **Insurance.** This particular type of resource helps manage risk. Project-related insurance should be captured in the project budget, whether as a separate line item or rolled into risk reserves.

As with many areas of the project, the project budget is tailored to fit the needs of the organization. That means that the team's time may or may not be captured in the project budget. Equipment the organization owns or existing supplies may or may not be included in the project budget, depending on the organizational process and policies for budgeting. These policies manage the budget and help maintain accurate accounts.

The PMP® Exam Content Outline Addresses Resources and the Project Budget

In the PMP® *Examination Content Outline* (ECO), Domain 2 (Process), Task 5: "Plan and manage budget and resources" is the only task that directly addresses "budget and resources." But resource management shows up in many places in the ECO and among the leadership skills necessary to support all ECO tasks, as we will look at in the following pages.

ECO Tasks to Support Managing the Budget, Resources, and Other Project Constraints

Think about the skills and abilities needed to manage a project holistically and successfully. They include many leadership skills (Table 3), as most closely related to the ECO’s **People** domain (Table 1), as well as technical project management skills, as most closely associated with the ECO’s **Process** domain (Table 2).

Table 1:	ECO Domain I: People Tasks	
1.1: Manage conflict		1.8: Negotiate project agreements
1.2: Lead a team		1.9: Collaborate with stakeholders
1.3: Support team performance		1.10: Build shared understanding
1.4: Empower team members and stakeholders		1.11: Engage and support virtual teams
1.5: Ensure team members/stakeholders are adequately trained		1.12: Define team ground rules
1.6: Build a team		1.13: Mentor relevant stakeholders
1.7: Address and remove impediments, obstacles, and blockers for the team		1.14: Promote performance through emotional intelligence
Table 2:	ECO Domain II: Process Tasks	
2.3: Assess and manage risks		2.7: Plan and manage quality of products/deliverables
2.5: Plan and manage budget and resources		2.8: Plan and manage scope
2.6: Plan and manage schedule		2.11: Plan and manage procurement
Table 3:	Leadership Skills	
- Understanding of project management leadership responsibilities		- Understanding and skillful use of motivation models and skill mastery
- Critical thinking		- Skillful use of communication technology and methods
- Emotional intelligence		- Understanding and skillful use of leadership and team development models
- Servant leadership mindset		- Negotiating and influencing skills
- Communication skills		- Skillful use training and coaching, recognition & rewards
- Active listening		- Understanding and skillful use of conflict management models and techniques

Relationships of Resources to Other Project Constraints

In Table 2 we could arguably include and talk about all **Process** domain tasks, but the table only includes tasks that most directly relate to managing project constraints through the budget and other project resources. Reviewing these included **Process** domain tasks should involve thinking about how all project constraints are interdependent, how changes to one constraint potentially affects all others, and how being able to deliver the product of the project depends on having the needed resources to do so.

Now, let's assume **People** domain tasks (in Table 1) and leadership skills (in Table 3) are necessary for management and leadership in all project management areas. Then, review figure 1 below, illustrating relationships between project constraints, in terms of their interdependence for managing project budgets and resources. These are the same constraints addressed with the **Process** domain tasks listed above in Table 2.

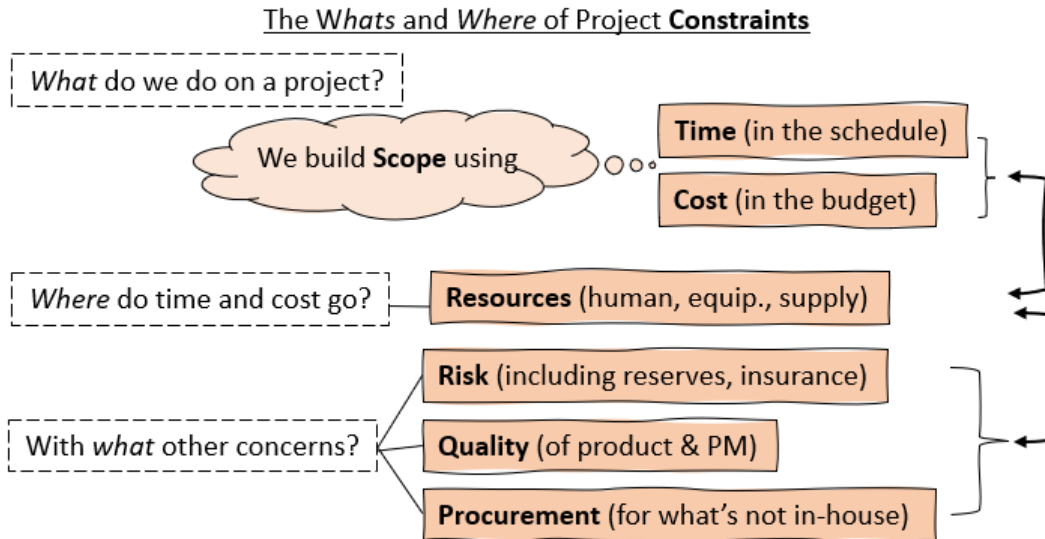


Figure 1. Interdependence of project constraints

How PMI's "Process Groups Model" Addresses Resources and the Project Budget

We begin with ECO tasks because as PMI states, the PMP® exam is based on the ECO. Another important PMI resource is **Process Groups: A Practice Guide** (PG practice guide).¹ We make great use of the information in the PG practice guide in RMC's **Rita Mulcahy's™ PMP® Exam Prep** book, 11th edition. Collectively, we call PMI's descriptions of the project management processes in its PG practice guide the "**Process Groups model.**" We use it as a learning model in the *PMP® Exam Prep* book, for understanding project management in general and plan-based project management in particular. With this in mind, let's review the relationship of managing project resources to managing the project budget, from the perspective of the Process Groups model.

¹ RMC covers what you need to know to pass the PMP® exam, including all resources mentioned in this article, in **Rita Mulcahy's™ PMP® Exam Prep** book, 11th edition, published by RMC Learning Solutions®.

This article complements information in **Rita Mulcahy's™ PMP® Exam Prep** book, 11th edition. If you are preparing for the PMP®, consider contacting RMC Learning Solutions® at info@rmcls.com to find the best prep strategy for you.

Relationships of Resources to PMI’s Process Groups Model Processes

Figures 2 and 3 are from RMC’s *PMP® Exam Prep* book. They illustrate the relationship between ECO tasks and the Resource Management and Cost Management processes in the Process Groups model. In the *PMP® Exam Prep* book, we grouped Control Resources with the conversation about cost management in the “Budget and Resources” chapter (chapter nine). The rest of the resource processes (Plan Resource Management, Estimate Activity Resources, Acquire Resources, Develop Team, Manage Team) are in the “Build and Support Team Performance chapter (chapter six). Because the Control Resources process deals with physical or material resources and is part of the Process domain’s task 5, “Plan and manage budget and resources,” this placement was logical. The other Resource Management processes are related to the ECO tasks in the People domain.

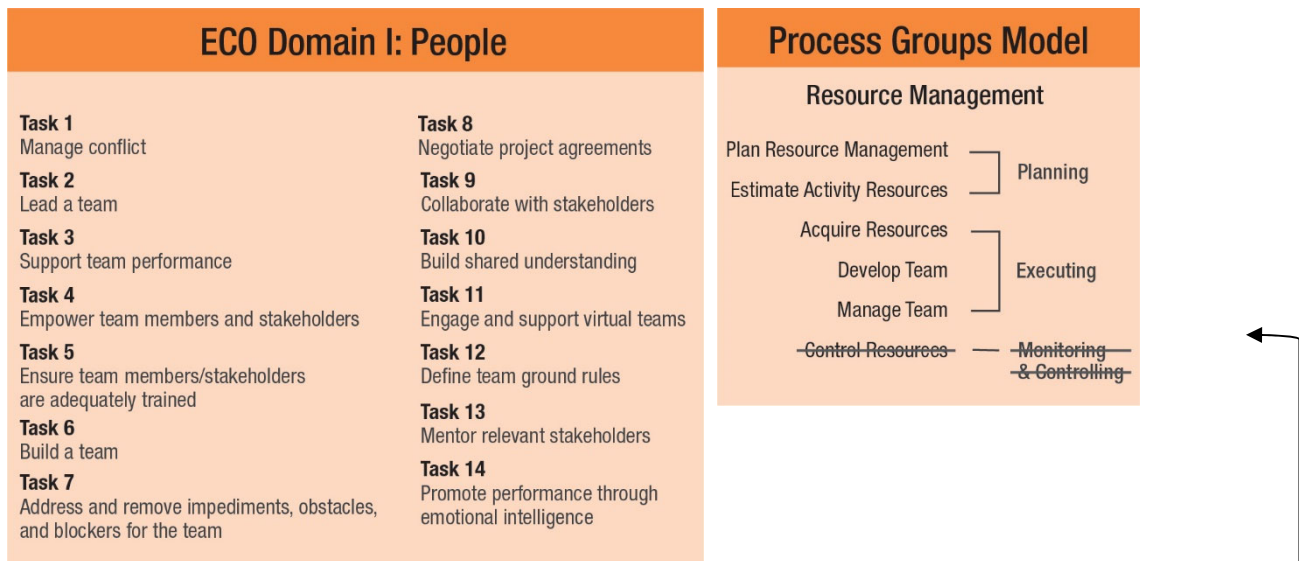


Figure 2. The ECO’s People domain and PG model’s Resource Management



Figure 3. The ECO’s budget and resources task and the PG model’s related processes

On the exam, you may see a Process Groups model process described in different ways on different questions, in different scenarios. You should be able to recognize what process a scenario is describing even if another term is used to describe the process.