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The Process View of the Organization

Matching supply and demand would be easy if business processes would be instantaneous and could immediately create any amount of supply to meet demand. Understanding the questions of "Why are business processes not instantaneous?" and "What constrains processes from creating more supply?" is thereby at the heart of operations management. To answer these questions, we need to take a detailed look at how business processes actually work. In this chapter, we introduce some concepts fundamental to process analysis. The key idea of the chapter is that it is not sufficient for a firm to create great products and services; the firm also must design and improve its business processes that supply its products and services.

To get more familiar with the process view of a firm, we now take a detailed look behind the scenes of a particular operation, namely the Department of Interventional Radiology at Presbyterian Hospital in Philadelphia.

2.1 Presbyterian Hospital in Philadelphia

Interventional radiology is a subspecialty field of radiology that uses advanced imaging techniques such as real-time X-rays, ultrasound, computed tomography, and magnetic resonance imaging to perform minimally invasive procedures.

Over the past decade, interventional radiology procedures have begun to replace an increasing number of standard "open surgical procedures" for a number of reasons. Instead of being performed in an operating room, interventional radiology procedures are performed in an angiography suite (see Figure 2.1). Although highly specialized, these rooms are less expensive to operate than conventional operating rooms. Interventional procedures are often safer and have dramatically shorter recovery times compared to traditional surgery. Also, an interventional radiologist is often able to treat diseases such as advanced liver cancer that cannot be helped by standard surgery.

Although we may not have been in the interventional radiology unit, many, if not most, of us have been in a radiology department of a hospital at some point in our life. From the perspective of the patient, the following steps need to take place before the patient can go home or return to his or her hospital unit. In process analysis, we refer to these steps as *activities*:

- Registration of the patient.
- Initial consultation with a doctor; signature of the consent form.