The Reliable Pharmaceutical Service is a privately held company incorporated in 1975 in Albuquerque, New Mexico. It provides pharmacy services to health-care delivery organizations that are too small to have their own in-house pharmacy. Reliable grew rapidly in its first decade, and by the late 1980s its clients included two dozen nursing homes, three residential rehabilitation facilities, two small psychiatric hospitals, and four small specialty medical hospitals. In 1990,

Reliable expanded its Albuquerque service area to include Santa Fe and started two new service areas in Las Cruces and Gallup. Reliable accepts pharmacy orders for patients in client facilities and delivers the orders in locked cases every 12 hours. In the Albuquerque and Santa Fe service area, Reliable employs approximately 12 delivery personnel, 20 pharmacist’s assistants (PAs), 6 licensed pharmacists, and 10 office and clerical staff.

Another 15 employees work in the Las Cruces and Gallup service areas. The management team includes another six people, mainly company owners. Personnel at each health-care facility submit patient prescription orders by telephone. Many prescriptions are standing orders, which are filled during every delivery cycle until specifically canceled. Orders are logged into a computer as they are received. At the start of each 12-hour shift, the computer generates case manifests for each floor or wing of each client facility. A case manifest identifies each patient and the drugs he or she has been prescribed, including when and how often the drugs should be administered. The shift supervisor assigns the case manifests to pharmacists, who in turn assign tasks to PAs. Pharmacists supervise and coordinate the PAs’ work. All drugs for a single patient are collected in one plastic drawer of a locking case. Each case is marked with the institution’s name, floor number, and wing number (if applicable). Each drawer is marked with the patient’s name and room number. Dividers are

 Inserted within a drawer to separate multiple prescriptions for the same patient. When all of the individual components of an order have been assembled, a pharmacist makes a final check of the contents, signs each page of the manifest, and places two copies of the manifest in the bottom of the case, one copy in a file cabinet in the assembly area, and the final copy in a mail basket for billing. When all of the cases have been assembled, they are loaded onto a truck and delivered to the health-care facilities. Order entry, billing, and inventory management procedures are a hodgepodge of manual and computer-assisted methods. Reliable uses a combination of Excel spreadsheets, an Access database, and antiquated custom-developed billing software running on personal computers. Pharmacy assistants use the custom-developed billing software to enter orders received by telephone and to produce case manifests. The system has become increasingly unwieldy as facility contracts and Medicare and Medicaid reimbursement procedures have become more complex. Some costs are billed to the healthcare facilities, some to insurance companies, some to Medicare and Medicaid, and some directly to patients. The company that developed and maintained the billing software has gone out of business, and the office staff has had to work around software shortcomings and limitations with cumbersome procedures. Inventory management is done manually. In 2004, Reliable’s revenues leveled off at $40 million and profits plateaued at $5.5 million. By 2008, revenue was declining approximately 4 percent per year, and profit was declining at over 8 percent per year. Several reasons for the decline included the following:

• Price controls in both Medicare and Medicaid reimbursements and

contracts with facilities managed by health maintenance organizations

(HMOs) and large national health-care companies

• Increasing competition from national retail pharmacy chains such as Walgreens and in-house pharmacies at large local hospitals

• Inefficient operating procedures, which haven’t received a comprehensive review or overhaul in almost two decades

Reliable’s management team spent most of the last year developing a strategic plan, the key element of which is a major effort to streamline operations to improve service and reduce costs. Management sees this effort as the only hope of surviving in a future dominated by large health-care companies that can dictate price and outsource pharmaceutical services to whomever they choose. Management plans a significant expansion into neighboring states after the system is up and running to recoup its costs and increase economies of scale. Reliable is much smaller than Rocky Mountain Outfitters, the company discussed in this chapter. But the organization still requires a comprehensive set of information systems to support its operations and management. We will include a case study at the end of each chapter that applies chapter concepts to Reliable Pharmaceutical Service.