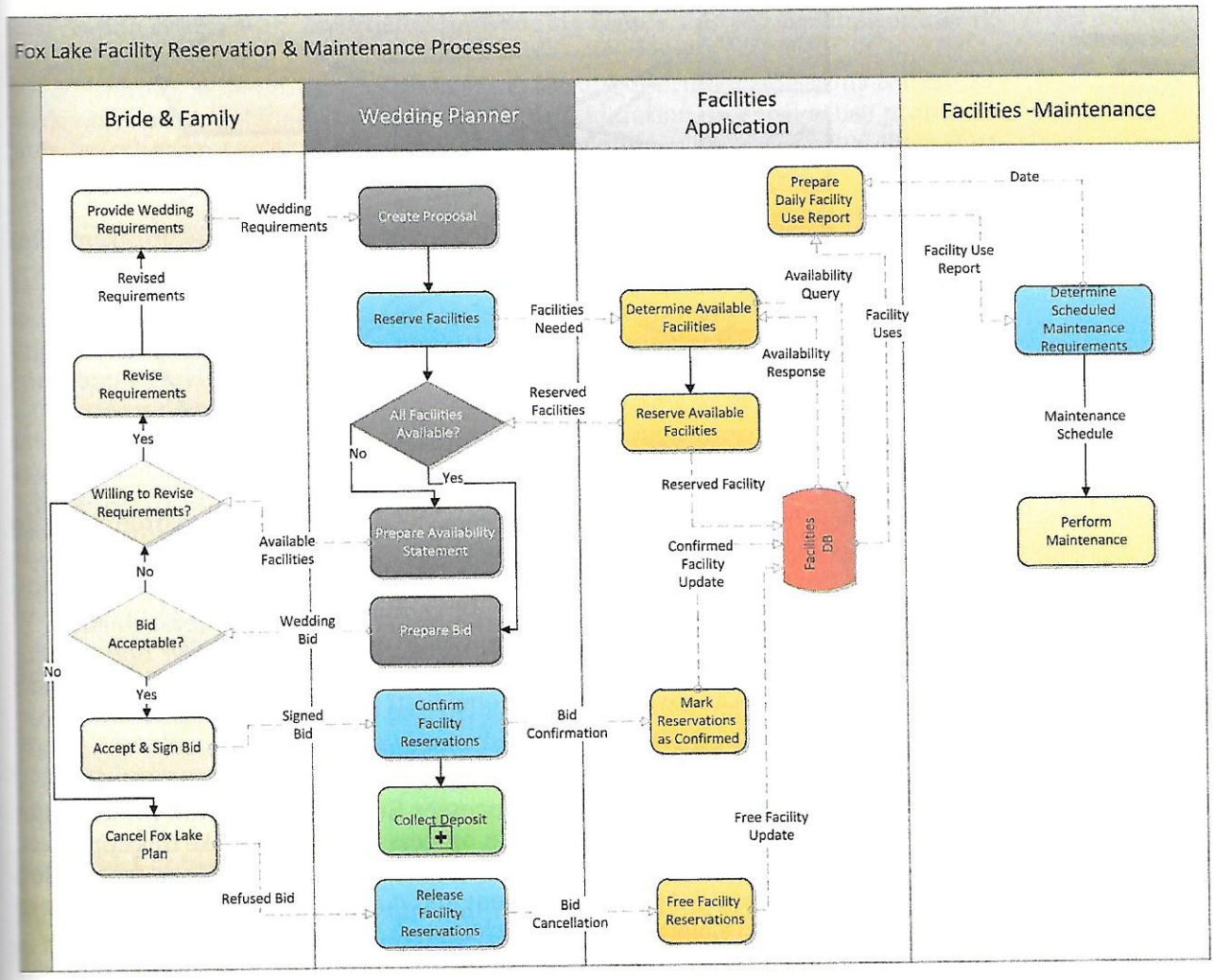

Figure 10-9
Fox Lake Processes Showing IS Components

are embedded within business processes, but there are activities in business processes that are not part of the information system. Second, this business process uses two separate information systems; and, in general, a business process can utilize zero, one, or more information systems.

The third principle is not visible in Figure 10-9, but we can infer it. The Facilities Reservation information system is likely to be used by other business processes. In fact, the Fox Lake billing process uses this system to bill customers for facility use. In addition, the budgetary process uses the Facility Reservation system to determine a budget for future facility revenue, and so forth. Thus, a particular information system may be used by one or more business processes.

Recalling the cardinality principles from Chapter 5, we can say that the relationship of business processes and information systems is many-to-many, as illustrated in Figure 10-10. For example, the Wedding Planning process uses two information systems (many), and, at the same time, the Facilities Scheduling system is used in four different business processes (also many).

Which Comes First?

Why do we care about this? What difference it make? The many-to-many relationship between business processes and information systems poses a dilemma when it comes time to build them. Which should we do first? Should we specify one or more business processes and then build the information systems that they require? Or, do we attempt to determine, in the abstract, all of the ways that someone might use an information system, build it, and then construct the business processes around it?