Telecommunications/Information Technology

Back in the "old days" of the 20th century when telecommunications was not even a word, we used to just have rotary dial phones that were connected to Bell Telephone (a.k.a. Ma Bell). (In fact, I remember when I was a kid we had phones that didn't even have dials on them. You just picked up the phone and told the operator the four-digit number you wanted -- sometimes even just the name of who you were calling.) Larger companies had switchboards that eventually gave way to a PBX system, and gradually became a high-tech computerized system. Fiber optic cables run throughout the facility networking, not only phone lines, but local area network (LAN) connections and other electronic hook-ups. OK, so that is an overly simplified description, but the concept is accurate.

I have combined Telecom and IT into one topic because they are, or can be, fairly interconnected. In fact I believe the term "IT" will eventually give way to "ICT" for Information/Communication Technology. With PDAs and Bluetooth and cell phones and iPhones all interacting with each other, the differences are becoming fuzzy. Whether we are talking about a facility-wide telephone system, a networked office computer system or an interconnected computerized manufacturing management system (CMMS), the technology demands are high. The size and complexity of the operation will determine whether it would be beneficial to have in-house Telecom/IT persons available or whether it would be better to have that contracted. Obviously, you would need to keep your people occupied during the day, but you would have to look at the criticality of each of the down-times. Thus going back to the priorities mentioned in the Maintenance section. You may actually have several contracts: one dealing with the telephone system; another with the computers and any number of contracts dealing with manufacturing and automation, etc.

If you have energy management systems, fire alarms, and/or security alarms, each of these may have a separate contract. Often the vendor/contractor from whom you purchased the equipment will provide extended service under contract. Because of licensing agreements or other proprietary requirements, you may be required to contract with the vendor/manufacturer for any kind of service. This should be considered when evaluating the life-cycle cost of a machine (another course). There may also be legal issues when dealing with life-safety systems like alarms. Often, an inspector/mechanic of a fire alarm system has to be certified/licensed in order to protect the liability of the owners. (The same often applies to fire sprinkler systems.)