WHAT IS INFORMATION TECHNOLOGY?

Information technology (IT) includes all tools that capture, store, process, exchange, and use information. The field of IT includes computer hardware, such as mainframe computers, servers, laptops, and PDAs; software, such as operating systems and applications for performing various functions; networks and related equipment, such as modems, routers, and switches; and databases for storing important data.

An organization's defined set of IT hardware, software, and networks is called its **IT infrastructure**. An organization also requires a staff of people called the **IT support organization** to plan, implement, operate, and support IT. In many firms, some or all technology support may be outsourced to another firm.

An organization's IT infrastructure must be integrated with employees and procedures to build, operate, and support **information systems**. These systems enable a firm to meet fundamental objectives, such as increasing revenue, reducing costs, improving decision making, enhancing customer relationships, and speeding up their products' time to market. For example, the new systems at Belarusbank will streamline work processes, provide access to customer data, and enable the bank to compete globally by offering new services to new customers. The bank's information system has many IT components: the mainframe computer and database that store business and customer information, the desktop and laptop computers used by employees, and network components that capture data at various branches and update the central database. A streamlined work process enables bank tellers, IT support staff, and other system users to operate efficiently and reliably.

Most organizations have a number of different information systems. When considering the role of business managers for working with IT, it is useful to divide information systems into three types: function IT, network IT, and enterprise IT.[4] Figure 1-1 shows the relationship among IT support staff, IT infrastructure, and the various types of information systems. These systems are explained in the following sections.