

Office Equipment: Types, Use and Care

HAVE YOU EVER been stuck at your school's copy machine waiting for someone to fix a paper jam? Have you ever been on hold and your call was disconnected when you were transferred? Proper use and care of office equipment can make a big difference in the impression businesses give to their customers as well as the productivity of their employees.



Objective:



Describe the types and operation of commonly used office equipment.

Key Terms:



central processing unit
(CPU)

cloud storage

external hard drive

fax machine

G Suite

inputting

Microsoft Office Suite

multifunction office
equipment

multifunction printer

network

network drive

outputting

PDF (Portable Document
Format)

photocopier

postage meter

processing

random access memory
(RAM)

real-time translation
device

scanner

secondary storage

shredder

speech recognition
software

storing

USB flash drive

videoconference

Office Equipment: Types, Uses and Care

There are certain types of office equipment that may be found no matter what type of business may be conducted in the office setting. Not all offices will look the same. Whether they

are in a physical building or completely in the cloud, the technology used will vary based on the tasks being performed by the organization. In general, there are three types of equipment found in an office. Those three types are computer equipment and related application software, communication equipment and general office equipment.

COMMON TYPES OF OFFICE EQUIPMENT

Computer Equipment and Related Application Software

Computer equipment and the peripherals associated are used to do many tasks in an office that were once done manually. As computer technology continues to advance, companies have taken advantage of the efficiency provided to increase productivity and profitability. Computer technology has allowed businesses to collect, calculate, search and store data at much quicker speeds using less storage space. Computers are typically networked among staff members within a business. A **network** is a collection of computers and devices connected together for the purpose of sharing information between computer users.

Computer hardware functions in four ways: inputting, processing, outputting, and storing data. **Inputting** is entering information into a computer. Keyboards and mice are typical devices used for inputting information. A **scanner** is a device that converts paper into a digital file so that a computer can open, manipulate, and store for computer use. The scanner typically converts the paper into a PDF or JPEG file. **PDF (Portable Document Format)** is an electronic file format that converts printed document to an electronic image that the user can view, navigate, print, or forward to someone else. PDF files are created using software such as Adobe Acrobat, Acrobat Capture, or similar products.

Processing is manipulating information within a computer by software. The **central processing unit (CPU)** is a device that executes the basic instructions that operate the computer. The **random access memory (RAM)** is the primary memory that manages the temporary storage of instructions being executed by the CPU.

Outputting is providing information that has been processed and appears in a finished format for viewing. Monitors, speakers, printers and projectors are common output devices found in an office. The **fax machine** is a device that sends and receives reproductions of documents over telephone lines by converting them to and from electronic signals. The fax machine allows users to insert a hard copy of a document that is then scanned and electronically



FIGURE 1. As technology advances, output devices have become more compact. In addition, many are wireless, communicating through bluetooth technology. Pictured is a compact projector that is battery-operated and wireless.

transferred to a second machine in a different physical location. The second machine then prints a hard copy of the transmitted document. Although many documents in the business world are scanned and emailed to recipients, fax machines are still used, especially for information that may be subject to email hackers.

Storing is preserving information for future reference. A **network drive** is a storage device that is connected to the server on a computer network. Businesses now store large amounts of information digitally, rather than with hard copies in filing cabinets. A **server** controls access to the hardware, software, and other resources on the network and provides a centralized storage area for programs, data, and information. **Secondary storage** refers to removable media ideal for housing files and folders to be stored away from the computer. A **USB flash drive** (32 MB–1 GB), sometimes called a pen drive or thumb drive, is a flash memory storage device that plugs into a USB port on a computer. USB flash drives are convenient for mobile users because they are small and lightweight enough to be transported on a keychain or in a pocket. An **external hard drive** is a device used to store electronic data that is connected to the computer through a USB port and holds larger amounts of data than a flash drive. External hard drives are available that hold a full terabyte of data. **Cloud storage** is a computing model in which data is stored on remote servers accessed from the internet, or "cloud." It is maintained, operated and managed by a cloud storage service provider. Individuals frequently use free accounts associated with Microsoft or Google for personal cloud storage. Organizations pay for cloud storage offered from a variety of companies, usually based on the amount of storage required.

Application software consists of specialized programs that tell a computer how to process information. Fundamental software categories are word processing, email, spreadsheets, databases, and presentations. **Microsoft Office Suite** is a collection of desktop business applications that includes Word, Excel, PowerPoint, Access, and Outlook. It may also include Publisher and OneNote, depending upon the package purchased. Microsoft Office is the most widely used business application package. The closest competitor is **G Suite**, Google's version of Microsoft Office Suite. **Speech recognition software** transcribes human speech to text and may be used instead of the keyboard for input. Within specific industries, specialized software exists to streamline common workflow tasks.

Communication Equipment

Although computer equipment may be used for communication, there are additional communication devices that are used for communication that may not be labeled computers. How-



FURTHER EXPLORATION...

ONLINE CONNECTION: Tips for Videoconferencing

Videoconferencing saves businesses time and money when done correctly. Learn tips for effective videoconferencing at the following link: <https://www.business.com/articles/video-conferencing-tips/>.

ever, items that are traditionally considered communication devices have components that are common to computers. Telephone systems are used to communicate within the organization as well as with customers and vendors. Many businesses issue cell phones for their employees to use for work communication. A **videoconference** allows participants from different locations to meet using audio and video technology. Videoconferencing is used in the global business environment to bring together partners from around the world for meetings without incurring travel expenses. Equipment required for videoconferences includes a camera, microphone, application software and video display screens. A **real-time translation device** provides immediate translation when people using different languages are speaking to one another, eliminating lags in communication and the need for a translator.



FIGURE 2. A videoconference allows participants from different locations to meet using audio and video technology.

General Office Equipment

There are several different pieces of equipment that may fall in the category of other general office equipment. Some of the most common are the photocopier, postage meter and shredder.

- ◆ A **photocopier** is a machine that duplicates documents that may include text or pictures. Although many documents are shared electronically, photocopiers are still a standard piece of equipment found in offices.
- ◆ A **postage meter** is equipment used to calculate the amount of postage required and imprint prepaid postage for envelopes and packages to be mailed through the postal service. Many offices have postage meters to assist in bulk mailings and facilitate shipping of packages.
- ◆ A **shredder** is a machine used to cut paper documents into very tiny pieces. Shredders are frequently used to destroy documents containing sensitive information such as client records.

Multifunction office equipment is office equipment that has been developed to perform tasks that historically were performed by several different machines. For example, a **multifunction printer** copies, faxes, scans and prints.

EQUIPMENT CARE AND MAINTENANCE

General Guidelines

Proper care and maintenance of office equipment is important. When equipment is adequately maintained it will last longer and run more efficiently, which save the business money. Any equipment malfunctions should be addressed quickly in order to maintain productivity of employees. When office equipment is not working properly it creates downtime and frustrates both employees and customers. Following are common care and maintenance guidelines for office equipment:

- ◆ Position equipment properly in the workspace. Equipment should not be too close to heaters or other equipment that may cause the item to overheat. In addition, equipment should not be located where there is a chance of the equipment gathering moisture.
- ◆ Office equipment should be cleaned regularly. Compressed air may be used to remove dust that collects on computers and other equipment. Monitors should be cleaned with microfiber cloth recommended by manufacturers.
- ◆ Surge protectors should be used to avoid damage from voltage spikes.
- ◆ Manufacturer's guidelines should be followed for regular care and maintenance. This may include scheduling maintenance by a professional to clean equipment such as photocopiers. In addition, manufacturer's specifications for paper weight and size should be followed for printers, photocopiers, fax machines and scanners.
- ◆ Address paper jams in equipment in a timely manner to avoid small pieces of paper becoming lodged in difficult to see locations.
- ◆ Regularly restock equipment supplies such as paper and staples in copiers.
- ◆ Keep contact information for equipment maintenance at hand so that it is easy to locate if a service call must be made. This information may include the model number of the equipment, customer number, warranty information, website address for the equipment manufacturer and procedures for contacting the servicing agent. Many office equipment suppliers provide online customer assistance and owners' manuals. There are several "how to" videos provided by manufactures to assist with equipment repairs and maintenance. Following are links to examples:
 - https://www.youtube.com/watch?v=1_XrLWzc1S4
 - <https://www.youtube.com/watch?v=uWumRRjO-LI>



FIGURE 3. Office equipment should be cleaned regularly.

Summary:



There are certain types of office equipment that may be found no matter what type of business may be conducted in the office setting. In general, there are three types of equipment found in an office. Those three types are computer equipment and related application software, communication equipment and general office equipment. Computer equipment is used to input, process, store and output information. Communications equipment includes traditional telephones, smartphones, and videoconferencing equipment. General office equipment includes photocopiers, shredders and postage meters. When equipment is adequately maintained it will last longer and run more efficiently, which save the business money.

Checking Your Knowledge:



1. What are the three main types of office equipment?
2. Give an example of input, output, process and storage equipment for computers.
3. What communication equipment is common for most businesses to have?
4. What is multifunction office equipment?
5. What are general guidelines for office equipment maintenance?

Expanding Your Knowledge:



Contact a local business about touring its office facilities. Ask for demonstrations of how the various office equipment works. Volunteer to help in the office for an afternoon so that you may get first-hand experience using the equipment.

Web Links:



Real-Time Translations with Google Assistant Headphones

<https://www.pocket-lint.com/headphones/news/google/146045-how-real-time-translation-works-on-google-assistant-headphones>

Best Videoconferencing Apps

<https://www.turbinehq.com/blog/5-video-conferencing-apps>

Office Equipment Maintenance

<https://careertrend.com/how-7924563-care-office-equipment.html>

Workplace Design Trends

<https://workdesign.com/2019/01/2019-workplace-trend-predictions/>