## Computer information paper

Art & Culture, Comedy



Computer Information PaperToday??™s technological breakthroughs render opportunities to discover various new means of communication as well as innovative means to assist the economy with new medical enhancements. To have a better understanding of the technological advances experienced, the need to look at the beginning of computers and their components are essential. One of the component variations of a computer is the hardware. This is an overview of the potential uses of some of those technologies in the hardware department. Input TechnologiesThe accuracy of data input is important in regard to ensuring that proper methods are used for various situations.

Printed questionnaires would be best used with the use of a (graphic tablet). A graphic tablet replaces the use of a mouse or trackball for the purpose of programming. This tablet has a flat surface for drawing and using a pen or stylus programmed to work with the tablet. This technology assists organizations that interact with public ideas and opinions, such as The Census Bureau, or the UPS delivery person. In regard to input technologies, one of them is the graphic tablet, and 24 others exist, but five of the 24 are highlighted for this particular moment. Voice-Recognition is another technology, which is one of the most critical technologies for the medical environment.

This particular technology serves the purpose of assisting physically challenged individuals, who cannot use other input devices, but can verbally respond. The ability to activate certain functions with just the sound of an individual?? $^{\text{m}}$ s voice is an ongoing study to simplify the technology for total in-home use. This technology is also capable for telephone surveys because

it converts voice sound waves into digital inputs. The local pharmacist is one of the most popular organizations that use this type of technology, when refilling a prescription, or obtaining physicians orders. When working with bank checks, the technology which serves best for such a task is the (magnetic ink character reader). These readers can identify all the pertinent information found on a check, such as the name of the bank, the checking account number, and the check number. Other areas of professional interaction with vital information are assisted by this technology as well.

One of the technologies that are used on a smaller scale today is the (point-of-sale terminals). This technology renders itself to the retail industry, for the purpose of reading the retail tags of the products sold in stores. These computerized cash registers may or may not have touchscreens, and are not limited to the utilization of barcode scanners for pricing. The fifth input device is the ever so faithful (keyboard). The keyboard is the most common and widely used input device. This particular device inputs text and numerical data into the computer terminals. The keyboard is also responsible for the creation of long documents as well as other interfacing activities.

Five input technologies are visited, and the remaining 19 devices are already in use and improved upon. These technologies allow individuals to put data into the computers through two methods, either human data-entry devices or source data-automation input devices. OUTPUT TECHNOLOGIES Output devices are very important for the convenience and quality of several tasks. Handheld computers are one of the output devices that provide portability

and convenience. (Electronic Books/Readers) are good examples of handheld computers.

The major food distribution corporations are using such devices for their inventory research teams. They offer the ability to move around freely with the ease of inputting data into a storage unit for uploading at a later time. These computers are wireless devices with on-board storage, capable of enabling access to all sorts of media and Internet resources.

For the individuals who enjoy viewing life-like color photographs, the (laser printers) are the best output devices for such a task. These devices use a laser beam that writes information onto a photosensitive drum, which produce a high resolution text and graphics. Inkjets are best for the creation of resumes, memorandums, and other textual documents, by shooting a fine stream of colored ink onto paper, offering the resolution quality equal to laser printers. The uses of (plotters) are essential to creating statistical reports. This technology uses computer-directed pens for creating high-quality images, blueprints, schematics, drawing of new products, etc.

Another output device to view is the LCD, which is better known as the (Liquid Crystal Display). This technological breakthrough is a flat display that has liquid crystals between two polarizers to form characters and images on a backlit screen.

This technology serves an organization for company annual reports and other high graphical displays. Output generated by a computer, is used by various means of transmitting information to the individuals through either output devices or media. STORAGE DEVICES Another area of hardware

recognition is the area of storage devices. Three types of storages exist within a computer system. The three types of storage are the primary, secondary, and enterprise storage systems. The primary storage is better known as the main memory, used to store information for very brief periods. Secondary storage saves large amounts of data for longer periods.

This storage is much larger and has a greater memory capacity than primary. Enterprise storage is an independent system with two or more storage devices with a large amount of space, and a high data transfer rate, and a sophisticated management tool. The hard disk (HD) is a secondary storage device that uses massive storage, because of its capacity to hold large amounts of data. This technology is low cost and offers a high speed, and a large storage capacity. The (HD) is a magnetized disk divides into tracks and sectors with addresses to pieces of data.

The floppy disk is another secondary storage device that holds less data then the hard disk and is as of the present time, one of the less used storage devices in the computer hardware industry. Both, the hard disk and the floppy disk are types of direct access storage devices. The name RAM refers to another type of storage, which is the primary storage of a system. Ram stands for Random Access Memory, which holds a program and small amounts of data for processing. This memory activates once a program arrives from the secondary storage, and accesses small parts of the program and data sent to the CPU. This is a volatile chip, which could lose all data if the presence of power is lost, or some type of power surge occurs.

One device that falls under secondary storage is an Optical Storage Device.

One of the devices is the CD Rom. CD Rom stands for Compact Disk,

Read ??" Only-Memory. This method of storage has a high capacity, low cost,
and highly durable. Because this device is read only, it cannot be written on.

The Tape stores and handles an enormous amount of data but is more timeconsuming than the CD Rom, because it stores data sequentially, and it has
to retrieve the data in the same manner. The CD Rom uses a laser that reads
the surface of a plastic platter, where the tape is also magnetic, but kept on
a large open reel, or encased in a smaller cartridge or cassette.

Flash or Jump Drives are portable storage devices that replace the floppy drive. This device is also referred to as a memory stick, or thumb drive. These devices fit into the Universal Serial Bus (USB) ports, in many different places. Flash drives connect with music players, video games, flash devices, and digital cameras. These devices are methods for storing data, text, and other multi-media material and can be portable and accessible through individual computer systems as well as some smaller computer systems.

COMPUTER SPEED The speed of a computer rely upon many factors, which it traced back to the performances of the central processing unit, primary and secondary storage devices, and method of input. The Random Access Memory (RAM) of a computer is a primary storage unit, better known as a ??? microprocessor chip.??? This chip holds a program and small amounts of data for processing.

RAM receives the newly started program from the secondary storage unit, and breaks it down to minimize the amount of data transmitting to the register of the CPU. The CPU receives the data and instructions about the data, and translates the data into a binary form. The speed of a CPU chip is measured by megahertz (MHz) and gigahertz (GHz). The CPU??™s speed in either MHz or GHZ is a preset clock that times the activities of the chip. This timed activity of the CPU refers to the Clock Speed of a chip. The clock speed is responsible for the amount of time that the CPU takes to translate data and send the information to another storage device. Once the data has passed through the CPU, it is then sent to an outside storage device, which stores more information for future retrieval. The data on a Hard disk are nonsequential, which makes retrieval faster than the taped data.

Being able to retrieve data from a storage unit is also a means for monitoring a computer??™s speed. The data on a hard disk lies, ready to access when the system boots up, where other devices such as the CD Rom, is not. The CD Rom is a portable storage source, which holds the burned data onto a plastic platter, allowing the user to read the material only. This is a process of a laser scanning the surface of the disk and reading the information within. This device offers the ease of speed and durability of content. The data on a floppy drive stores in the same manner. The data that is sent from the CPU and translated can be written, deleted, and edited, on this type of device.

The floppy disk is another secondary storage device that have write and rewrite functionalities. These devices offer different methods and speeds to retrieve data. Some of these devices can store an enormous amount of data, whereas others can store limited amounts. CONCLUSIONThe basic structure of the inner workings of a computer system can become quite complex, as the technology continues to advance.

According to Gordon Moore (1965), the complexity of the microprocessors would double approximately every two years. Computers are advancing with more ways of interfacing, and communicating the data that it stores. As computers grow smaller, and chips advance in speed and processor conductivity, the functionality of such computers are limitless. (" Moore??™s Law, Made real by Intel Innovations", 1965, para. 1) (Rainer Jr. & Cegielski, 2007)