Speed of a computer

Technology, Computer



Speed of a Computer Patrick Reagan Computers and Information Processing/CIS319 David Avery Jr. December 14, 2008 Speed of a Computer Computers have evolved dramatically over the last 70 years. The size may be one of the main changes. The first computers were the size of a classroom. Today a computer can fit in an adult hand. Another change is the speed in which the computer operates or processes information. The computer user in today's market wants information as soon as possible. The demand for increased speed is determined by several factors. A few of these factors are Random Access Memory (RAM), clock speed, data on the hard disc, data on a CD ROM, and data on a floppy disc. The role of these factors can determine the speed of a computer. Random Access Memory, otherwise referred to as RAM, is a working area where the operating system (e.g. Windows), programs and data in current use are kept, ready to be accessed by the processor (Davies 2004). Another way to explain this is to relate the RAM to building a house. Several aspects of the house may be constructed and kept away from the house foundation i. e. walls, rafters and cabinets. The items in the outside working area are in standby and ready to be accessed by the construction manager. The larger the RAM or work area to do preliminary processes contributes to the speed of building the house or the speed of the computer processor. An adequate amount of RAM is 256MB. The demand for a faster computer would require 512MB of RAM. This provides a larger work area for preliminary work processes and contributes to the speed of the computer. The clock speed is how fast the processors operate. The speed is measured in megahertz (MHz) or gigahertz (GHz). The clock speed determines how many instructions per second the

microprocessor can execute. The speed of the computer is a user preference. A 700 MHz system may be suitable for an individual with basic computer needs. Whereas another user would consider a 700MHz extremely slow and would prefer a 2. 4GHz system. The larger the processor would determine the clock speed and in return affects the speed of the computer. A hard disc is a magnetic disk on which the user can store computer data on a more permanent basis (Davies 2004). The majority of hard disc are internal components of the computer system but an external unit can be used to store additional information. The unit of measure is MHz and GHz. The larger size disc allows more information to be stored. This information can be accessed directly since the information has been stored internally. The ability to access the information or program internally increases the operation speed for the user. If the information was not stored on the hard disc, the user would have to install it each time which would slow the process. Data on a CD ROM can assist in the speed of a computer system. A user may not need a specific program or information all the time. The CD ROM can be used instead of installing the information or program on the hard disc which would take up memory. The CD ROM drive is used to play CD ROMs. The CD ROM drive is measured between 12x and 48x which dictates the speed the data is extracted. The floppy disc is becoming extinct. Most computers in today's market come with a combination CD ROM/DVD drive. A user would first have to format a floppy disc before any information could be stored. This took time and decreased the speed to download information. The amount of space on the floppy disc can cause speed issues. A user may need multiple floppy discs to store the same information that one Compact

Disc Rewritable would store. The speed of a computer plays an important part to the user. Understanding which component or hardware affects the computer speed will provide information or education that the user could use to manage the speed. The operations of Random Access Memory (RAM), clock speed, data on the hard disc, data on a CD ROM, and data on a floppy disc are some of the factors which could affect the speed of the computer. Upgrading some of the mentioned factors would increase the speed of the computer to satisfy the user needs. Reference Page Davies, G. (2004). Introduction to computer hardware and software. Google. Retrieved December 13, 2008, from www. ict4lt. org/en/en-mod 1-2