SECTION XX. INFORMATION TECHNOLOGIES AND SYSTEMS

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ADVANTAGES AND DISADVANTAGES IN CHOOSING A PERSONAL COMPUTER OR A LAPTOP

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The computer is a great human invention, with which you can do everything, from solving various examples to creating professional programs that will help the man himself later. The first modern computer was created only in the middle of the XX century by the German engineer Konrad Zuse[3]. The appearance of such a computer was disgusting, as if in front of you a big box, and it had little functionality. Later, approaching the twenty-first century, the computers were in great demand and soon began to be improved. So, in 1998, the first computer appeared in America[3] that also could resembled the modern machine. And at the beginning of the XXI century a large number of companies began to develop and create computers. Who would have thought that giant computing machines, which occupied almost the entire room, after a while would turn into small computers, which are now of great use to mankind.

With the development of the computer industry many varieties of computers have also appeared, which are differ in size, power, functions and applications. But the most common among ordinary users are personal computers and laptops. And nowadays, people who are not specialists in the field of a computer technology, and choose a computer for everyday tasks, that is used for different purposes; we often ask to themself a question, what kind of device is better to choose for themselves: a personal computer or a laptop.

This question cannot be answered definitely, it is more a question of personal preferences or lifestyle of the owner. Otherwise, to know the main disadvantages and advantages of each type of smart technology it is necessary to make the right choice.

Let's look at the advantages of a desktop computer. The most important advantage of the "big brother" of the computing technology is power. Not squeezed into rigid limits on power consumption and heat generation the microprocessor shows its real abilities. A more efficient cooling system in this case will give a good increase in performance, because the desktop computer can easily be overclocked. Additional speed is given by faster and roomier "cache memory"[2].

The second reason why a desktop computer is better than a laptop is the ease with which it can be improved or upgraded. There is enough space in a system unit for just about anything the user wants to install there. The most advanced system units can easily accommodate a tandem of two graphics cards, noiseless and bulky cooling system, several hard drives, a comparatively large amount of RAM [1]. One more thing, if any component fails, the user is often able to replace it himself, without going to the service center.

Let's compare the disadvantages of a desktop computer with a laptop computer. Little mobility makes it impossible to carry it around in a bag. Even moving it to another corner of the room will take some time. The greater power consumption in comparison and as a consequence, the release of heat is also a disadvantage. All of the above disadvantages are not inherent in the younger brother of the desktop computing machine. Battery life thanks to the built-in battery in most models is close to three hours, and some even live up to seven hours without recharging. This is due to the high energy efficiency of each component device. High mobility is guaranteed by its size and self-contained power supply. Thanks to this laptop can be taken with you on vacation or on a business trip. Small size and weight is the main reason of choosing a portable computer.

So, when we choose a laptop it almost includes all the devices that are necessary for its use. It consists of a monitor, a keyboard, speakers, camera, touchpad, CD/DVD drive, Wi-Fi and VGA connector on board [1].

The main disadvantage of laptops is the low computing power. This does not mean that the laptop will cope worse with its direct responsibilities. Both types of these devices are absolutely identical in their functions, only the laptop performs all operations more slowly. For using computer games and complex graphics it is much less suitable than its bulky counterpart. The same situation is observed with the speed of RAM and permanent memory. One more drawback of a laptop is its complexity of repairing and modernization. After all, if there is a need to replace a hard drive or a video card, the user is likely to have to apply for this in the service center. The viewing angle in notebook monitors is quite small. Because of a small size of the cooling system, affecting its efficiency, the laptop is often very hot, and sometimes it shuts down in the middle of work. The relatively high cost also does not speak in its favor.

In conclusion, given all the pros and each type computer cons, it is impossible to unequivocally decide on the choice. People are all different, some people cannot imagine themselves without computer games, the others use a computer only to access Internet. Therefore, the best solution to this question would be - to have both a laptop and a desktop computer - I came to this option, as a result of my direct connection to computer science, and I have both a PC and a laptop. If there is no such a possibility, you should consider that a simple laptop will be quite enough for watching videos and ordinary Internet work, and inveterate gamers or people who need always relevant, powerful and multi-functional assistant, a desktop computer will be more suitable.

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