Rayhan Malik

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Topic: The Laptop and Its Impact on the World Today

Introduction

Laptops are one of the most innovative recent inventions and have greatly impacted how we do things in the 21st Century. They have greatly impacted our lives with their portability and convenience. Laptops have a rechargeable battery with the life of two to eight hours and come with charger. This greatly helps in making them portable. Laptops are very similar to desktops, a major difference being that they are more compact, lighter, and more portable than a desktop. These machines have impacted our lives greatly and I will discuss their history, how they work and how they are different from desktops, and what we can expect from them in the future.

Background

It is not easy to look back and say who invented the computer. It started when people used abacus to carry out repetitive calculation in 300 B.C. After over 2000 years of improvements, a mechanical computer was invented in the 20th Century, which performed a few functions and was huge in size. At this time, computers were very expensive, big, and used by the army, government, and large businesses.

It wasn't until the 1970s when the idea of personal computers became attractive. In 1971, the first desktop was invented by IBM. However, it was still large in size and couldn't really perform multiple tasks. In 1970, the first laptop called the Dynabook was invented by Alan Key. It did not receive much attention since it could not perform many tasks and was not too useful. It did, however, create the platform for an innovative invention that would change the world. In 1979, William Moggridge created the Grid Compass 1100, which was the first laptop to ever be sold. It's clamshell design is still used in the modern notebooks of today. These laptops were bought by NASA and the American army for $8150 a piece. 3 years later, IBM

created the first commercial laptop. It weighed 15 pounds could only carry out one task at a time. These laptops were sold around $4000. These products from IBM were the inspiration for companies such as HP, Toshiba, and Apple to design laptops with greater functions and better features to sell commercially (Reich, 2008).

Intricacies of a Laptop and Differences from a Desktop

Though the functions and user interface of a laptop and desktop may be the same, there are differences in the designs of the two. One of the biggest differences is how the two are fit together. Desktops are much bigger in size since they have multiple components such as the CPU, monitor, speakers, and wires that connect them. A laptop on the other hand is compact, having all components joined together in a flat design. This is also why the laptop is more portable and expensive than a desktop (Wilson, 2000).

It is intriguing to see how the internals of a laptop differ from a desktop. In a desktop, the CPU has a fan which cools it down in order to prevent the system from overheating. A laptop's fan on the other hand is not large enough to get rid of the heat, so a laptop CPU runs on far less voltage than a desktop CPU. Although, running on lower voltage prevents the CPU in a laptop from overheating, the downside is that the processor becomes slower. Laptops also possess a sleep and rest mode in which the operating system takes a rest when it is not in use. This conserves the battery as well (Pegoraro, 2001).

In the past, laptops were only considered useful for those who really needed a portable computer. They were slow and far less useful than a desktop. This has changed greatly recently and laptops have thus become an attractive option. Even though, laptops are slower than desktops, there is enough processor speed and memory to perform multiple tasks. Some laptops

use cache memory on the CPU, which makes their processors faster. The laptops come with bigger buses now as well, making them even more like desktops (Wilson, 2000).

Desktops and laptops both run on electricity. However, the biggest difference between the two is that laptops can run on its own portable battery, whereas a desktop always needs to be plugged in and have electricity. Laptop batteries weigh three to six pounds and are useable for two to eight hours. These batteries have allowed for the portability of the laptop and have greatly contributed to the change laptops have brought in the world today (Pegoraro,2001).

Advantages/Disadvantages of a Laptop

Laptops have greatly impacted the world. Two decades ago, who could have thought that we would be carrying our own personal computers with us wherever we go. They are one of the most useful and impacting inventions of the 21st century. Before, one had to be in an office or at home in order to get work done or browse the internet. Now, one can be outdoors, in a coffee shop, or any place and still be able to work. Students can learn and take notes more effectively in class now due to the laptop. One can watch movies on the go now as well. A laptop can accomplish all the tasks of a desktop, except that it is mobile, so they can be done anywhere. Even though the laptop is a very innovative and useful invention, it does have its disadvantages. Laptops are almost impossible to upgrade. So, when one buys a laptop he/she is stuck with it for 3-4 years after which the laptop starts having problems. At that point the laptop should be replaced.

What the Future Holds

A virtual laptop is being explored for the future. In this design, a 3D image will be broadcasted on which you can type, read a Braille newspaper (for the blind), and carry out

computer tasks. A laptop called Cario is coming in the future which will project maps and directions on a car's windshield (Nadel, 2008).

The CPU's front side bus is to disappear and instead be replaced by an integrated controller which will make the distribution of data much more efficient by operating faster. Storage will become greater and will be compacted into smaller packages. Currently, adding 64 GB of solid state capacity to a laptop's hard drive costs $1000. By 2015, the typical mainstream notebook may have a 2 TB disk drive. There will be enough memory for even the biggest "data hogs." LED screens should replace the LCD screens of today, making the screen brighter, more vibrant, and at the same time conserving battery. Notebooks are to get smarter and their components will continue to shrink. These new notebooks will carry out tasks we can only dream of today just as having one's own personal laptop was a dream at a time (Nadel, 2008).

Conclusion

Laptops are one of the most revolutionary and useful items we use in the 21st Century. They have made our lives more convenient and easier. One can work, surf the internet, and carry out various other tasks almost any place you go. There are many advantages to having a laptop, however everything has its disadvantages as well. The advantages include its portability and convenience. Its disadvantages are that some of its features are not as strong as a desktop's such as processor speed and memory. There has been great progress made in the computer industry which has led to the laptops of today and it continuing to be made. Laptops have a very bright future with many useful and innovative designs and versions to come.

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