

Past, present, and future of computers

[Technology](#), [Artificial Intelligence](#)



A computer is an electronic device that is used to automate processes in order to enhance the quality of life for all people. This device will be used extensively in the future because of its availability and its ability to simplify many of the actions in our daily lives. Computers are devices that have a rich history, a revolutionary present, and a promising future mainly due to the fact that it's a device that remains prominent in our everyday lives. The importance of a computer is emphasized by the quote: " I'm a great believer that any tool that enhances communication has profound effects in terms of how people can learn from each other, and how they can achieve the kind of freedoms that they're interested in." – Bill Gates.

The quotation by Bill Gates elaborates upon the fact that computers make for a more connected society where an idea can be communicated to anybody who wishes to act on the idea. The first computers were made by individuals who were striving to create devices that have the ability to automate processes. Individuals such as Alan Turing innovated and transformed the computer industry by creating the blueprint for the algorithms and computations for computers called the Turing Model. The Turing Model paved the way for the first working programmable computer that is automatic was called the Z3 Computer made by Konrad Zuse in 1936.

The next major computer with workable programming that was made was the IBM 701 EDPM Computer. IBM became one of the first computers to be marketed by a major company. From the creation of the IBM 701, the first successful programming language called FORTRAN was created by IBM and John Backus. The next major innovation was the computer mouse made by Douglas Englebart. The 1970's was one of the most innovative decades for

computers with the invention of the floppy disk, random access memory, microprocessors and the first computers available to consumers. All of these components made way for the marketing and technology involved in modern day computing. The two major computer rivals, Apple and Microsoft, entered the stage with during the late 1970's all the way through the 1980's, giving competition to IBM. Apple released Apple I, Apple II, and the Apple Lisa Computer, which had the first graphic user interface, and the Apple Macintosh, which revolutionized the market by making computers more affordable to the public. During this time, Microsoft developed MS-DOS operating system and the business renowned Microsoft Windows. Smaller companies contributed to the computer industry by creating with the creation of WordStar, which is the first word processing software, and VisiCalc Spreadsheet, which was the first software which had a similar function as Excel.

Computers in the present day are part of our everyday lives with its increased availability to everybody, the convenience it provides and the successful marketing that many companies use to promote the idea that their technology will make life better as a whole. The current market is dominated by mobile computing such as smartphones and tablets, with the traditional laptop and desktop losing market share. The shift in mobile computing is largely due to the fact that mobile computers are cheaper, more portable, and able to do most of the actions that the traditional computer can do. Most smartphones are essentially an ultimate system for entertainment, business and social interaction because they provide features

such as cameras and applications that help us communicate, navigate, socialize, work, and play.

Tablet computing on the other hand strikes a balance with the traditional computer and the smartphone due to its size, portability and smartphone-like features. Many technology companies today are shifting into the development of new and revolutionary products to improve the processing capability on our smartphones and tablets instead of the traditional personal computer market. The computer industry is an industry that runs and survives on innovation. Every year, new products are released that make a substantial improvement on the previous model, therefore creating a cycle of never ending improvement upon a product in order to stay competitive.

The computer market constantly shifts to whoever has the best hardware integrated with the most usable software, therefore giving an advantage to those who have access to what is considered to be good technology. For example, the smartphone market always goes in the favor the phones with the best cameras, best processors and adaptable software, with a few exceptions. The most prominent way that a product gains market share is through marketing. Apple is the most recent technology company to make a breakthrough in technology with the creation of devices such as the iPhone and iPad. The iDevices don't have the best hardware, nor do they necessarily have the best software, but through the marketing campaigns that emphasized where the device excels, Apple has converted the flaws of the devices into something that can be accepted as high-end. Many other companies are also gaining market share with the creation of a multitude of products that have the ability to compete with all of the Apple products.

Computers are products that dominate our daily lives. We use computers for everything ranging from manufacturing and research, to entertainment and productivity. Computers have made many jobs obsolete such as assembly line manufacturing and aspects of marketing such as keeping track of sales and costs. Despite the loss of jobs, computers also make a lot of fields such as healthcare and the government easier by storing a lot of important and confidential data on secure databases. The effects that computers have on the field of jobs are tremendous, but it's important to look at its effects on our daily lives. Computers help us get started in the day by acting as our planner, entertain us by providing rich a lot of content, and helping us do work. Schools are also a huge market for computing because a multitude of students require computers to do research and write and edit papers.

Computers for students are also one of the best tools for learning because it provides a new interactive way of learning with content that is up to date. Teachers also use computers in order to keep track of students, communicate with other teachers and plan lessons accordingly. Major industries such as the health industry, tech industry, and banking industry will continue to benefit from computers because computers help the growth of business and improve management of large swaths of data needed to function. The computer has and will continue to revolutionize the way we work by acting as a tool that makes a work force more connected, therefore increasing productivity.

The future of the computer industry is a promising one because of the numerous advances that can be made in the industry. The key component in the advancement of computer technology is based on Moore's Law, which

states that the number of transistors that can fit in a chip will double every two years. Moore's law also applies to the processing speed of computers and the amount of RAM that can be inserted to the computer. However, slowdown in the chip development industry has made Moore's law a bit inaccurate by making the doubling in transistors occur every 3 years instead of two years. The increase in processing speed and the transistors in the chip will all lead to the development of Artificial Intelligence that is capable of learning. Artificial Intelligence, or AI, that can learn will revolutionize modern and future society by providing machines that are able to act human without some of the flaws that are natural to all humans. In accordance to current technology, Artificial intelligence will take the form of a hardware robot due to its ability to do physical activity while being able to process a lot of information at the same time.

Artificial Intelligence is a technology that already exists in the form of software in our phones, cars and many other electronic devices. The most marketed version of Artificial Intelligence is Apple's Siri, which is a voice assistant that makes searching the internet and keeping track of dates easier. Siri is a stepping stone in the development of artificial technology due to the fact that it demonstrates the capability of computer hardware and the many advances that can be made through the software that will be integrated to the hardware.

The only way to understand how the computer has integrated into our present and will continue to the future is through the understanding of the internet, more specifically the cloud. The cloud is in reference that all our data can and most likely will be stored wirelessly in the near future. The

perfection and infinity of the cloud will mean that our computer dependency will continue to increase over time. The cloud provides a way of storing all our digital content on the internet, ready for access and open to sharing. All the major tech companies such as Apple and Google have made cloud computing exclusive to only devices that are made by the company or the backers of the company. The internet is also a web of things that continually grows as time passes due to the addition of new content. Major advancements in cloud technology can lead to the futuristic problem of dependency on the internet ranging from leisure to work. The cloud revolutionizes the way that information is stored and shared.

Computers are the devices that enlighten us through intercommunication and the sharing of ideas, but at the same time dehumanizes us through the dependency in the technology. Aside from the negative effects of the computer, a computer will be the one device that will make the overall quality of life better by making digital media accessible and for the most part mobile. In accordance to the rich history of computer, it is clear that the future of computing will be a largely positive one. Future concepts such as artificial intelligence is clear evidence that there are still many undiscovered artifacts in the world of computers. Advances in computer technology will be the defining factor of humanity due to its importance in defining the innovative spirit.