

Impact of the invention of transistors on society essay sample

[Technology](#), [Internet](#)



Thermionic valves which were once used in computers, radios, and TVs were replaced by transistors. Compared to thermionic valves transistors:

~Had much smaller sizes (miniaturization)

~Much cheaper and more reliable

~Used less power

When transistors were first developed they were about 0.5 cm³ in volume. It was found that transistors could also be miniaturized by using silicon doped with arsenic/gallium. Several million transistors could now be placed on an area of 1 cm². This had enormous consequences for the design and development of computers, CD players, internet, mobile phones, cable TV, robots, military technology and medical diagnosis & treatment.

The use of transistors in microprocessors and microchips (thousands of transistors may be on this chip) made possible a continuous decline in the real price of computers and a continuous increase in processing power.

Computers are now used in many different professions such as law, engineering, medicine, and in small businesses such as restaurants, real estate agencies, etc.

Computers have been responsible for the elimination of many traditional jobs (eg. printing) and the creation of many new ones (eg. Word processing, computer programming, etc.)

Microchips are found in mobile phones which have enabled instantaneous communication between people in cars, between traveling salespersons & head office, between parents and young children away from home. Mobile phones allowed contact between people who don't have access to a landline phone.

The development of robots having higher intelligence and cheaper cost is only possible with the extensive use of microprocessors. Robots are now used in large factories to do repetitive manual work once done by human beings.

The development of bombs having very high accuracy has changed the value of military warfare. Instead of using 10 bombs, knowing that 9 will miss, only one bomb is necessary to hit target.

Microprocessors are essential for the internet which in turn enables organizations to have a permanent site dedicated to supplying information about themselves. This is of use to customers and business people who wish to find out more about companies product/services. Internet commerce is becoming increasingly common. The physical distance between a companies location and the consumer becomes irrelevant.