

History of telephone



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History of the telephone DeVry University History of the telephone *

Introduction The telephone was one of the greatest American inventions. The telephone has developed from something that was not a necessity to something people must have. The telephone had many impacts on society and the way we communicated and still plays a huge role in the world we live today. The telephone opened the door for communications across the world and played a part in the development of personal and business cultures by allowing people from different countries the ability to communicate with ease. * Thesis Statement

When the telephone was first introduced to society, people were skeptical about its replacement of the telegram system, over time this new way of communication has become one of the most important inventions of all time and won the hearts of many. * Discuss the background of the time period (insert author and date) Less than 150 years ago, communications were limited to messages delivery by person. As scientific knowledge grew that electricity could be transferred from one place to another, inventers begin to experiment with the possibility that same principle could apply to communications.

The results were great inventions the first steps that could bring the world closer together. Instantaneously the first communication was possibly with the telegraph. In 1844 Samuel Moor was the first man that was successful to send a message with a telegraph (Cason, 1910). The battery powered telegraph gave host to whole new inventions. If the telegraph sent a message, then the communications rennasons was on the risen. One of the

history's greatest and most influential inventions that actually put it into words the telephone. Alexander Bell initially called it the speaking telegraph.

Telephone was the telegraph line, which he put a microphone and a speaker at each end so the spoken voice could be sent instead of dots and dashes. *

Discuss the climate of the period that led to the advancement (insert author and date) Alexander Gram Bell had discovered that electrical occurrence could exactly duplicate sound, transmitting sound waves by vibrating in the air at serious frequencies. The Scottish-born Bell worked in London with his father, Melville Bell, who developed Visible Speech, a written system used to teach speaking to the deaf.

In the 1870s, the Bells moved to Boston, Massachusetts, where the younger Bell found work as a teacher a teacher for the deaf and had spent a great deal of time studying sound and acoustics (Count Du. Moncel Theadore, 1879). Working with his assistance Thomas Watson, Alexander Bell realized that you could not only sent a set of different sound tones over the wire but you could actually sent one complex sound wave the human voice. He realizes in March of 1876, and sends a message over telegraph wire when he says to Watson " come here, I need you. Watson heard it over the receiver and was very excited (Count Du. Moncel Theadore, 1879). III. Effects of Advancement * Discuss the advancement in detail (insert author and date) Bell thought of a technique of sending multiple tones on a telegraph wire using a multi-reed device (telephone). In 1875, Bell invented an acoustic telegraph (Cason, 1910). March 10, 1876, Bell succeeded in getting his telephone to work, using a liquid transmitter (Boettinger, 1983). Vibration of

the diaphragm caused a needle to vibrate in the water, varying the electrical resistance.

On March 7, 1876, 29-year-old Alexander Graham Bell receives a patent for his revolutionary new invention—the telephone. Ironically, telephone did not catch on right away (Count Du. Moncel Theadore, 1879). In fact, the leading telecommunication giant at that time Western Union refused Bell's offer to sell them the patent for \$100 thousand dollars (FCC, 1939). Little by little, the public started to gravitate toward the phone. By 1877, Western Union begins to rethink, their decision and offered to buy from Bell the telephone and the company. Bell refused; he knew at that point that he had a good thing (FCC, 1939).

The Bell Telephone Company was established in 1877 to bring telephone to the masses (FCC, 1939). The first public demonstrations of the telephone followed shortly afterward, featuring a design similar to the earlier magnetic coil membrane units. One of the earliest demonstrations occurred in June 1876 at the Centennial Exposition in Philadelphia. Further tests and refinement of equipment followed shortly afterward. On Oct. 9, 1876, Bell conducted a two-way test of his telephone over a five-km (little over three miles) distance between Boston and Cambridge port, Mass (Cason, 1910).

In May 1877, the first commercial application of the telephone took place with the installation of telephones in offices of customers of the E. T. Holmes burglar alarm company (FCC, 1939). The poor performance of early telephone transmitters prompted a number of inventors to pursue further work in this area. Among them was Thomas Alva Edison, whose 1886 design

for a voice transmitter consisted of a cavity filled with granules of carbonized anthracite coal (Boettinger, 1983). The carbon granules were confined between two electrodes through which a constant electric current was passed.

One of the electrodes was attached to a thin iron diaphragm, and, as sound waves forced the diaphragm to vibrate, the carbon granules were alternately compressed and released. As the distance across the granules fluctuated, resistance to the electric current also fluctuated, and the resulting variations in current were transmitted to the receiver. Edison's carbon transmitter was sufficiently simple, effective, cheap, and durable that it became the basis for standard telephone transmitter design through the 1970s (Boettinger, 1983).

Discuss how the advancement affected the humanities (insert author and date) In the first two years after the invention of the telephone, all subscribers in a particular area were linked to each other via a telephone line. When one wished to call another party, s/he would call directly across the line indicating the desired recipient by the number of rings sounded. Due to many technical problems and wariness of the general public, technicians invented exchange systems and switchboards so that all lines would come into a central office where they could be connected to other lines through a switchboard.

With technology advancements, there was also a social shift in gender representation in workforce. In the beginning, most operators were male. Although women began to be hired in 1978, it was not until a few years later that they became to be more desired for their gentle and poised manner as well as their ability to communicate calmly and pleasantly. When mobile

phones were introduced, they were viewed as an exclusive form of telephone service that might possibly suit certain mobile workforces, such as craftsmen, photographers and repairmen (Brock, 1981).

Nevertheless, everyone underestimated the importance that mobile phones would assume for person-to-person communications. “ In the 1870s, when the telephone was introduced it was also regarded as a luxury for businessmen, doctors, craftsmen, etc.. ”(Boettinger, 1983). Telephone was a device of dubious usefulness that certainly could not compete with the telegraph, which of course conveyed explicit written messages, not just idle chat. Before long, however, people began to find uses for the telephone, particularly among family and friends. The mobile phone is now a part of our popular culture.

New customs, rituals and routines are developing around what is being used every day. In the pre-industrial society people sang songs about planting and harvesting. In rock music, from the fifties and onwards, cars and motorbikes have been recurring themes. It is only natural that nowadays, in the post-industrialist world of IT we are listening to songs about mobile phones. The mobile phone has changed our attitudes and expectations. If people are late to a meeting, they are expected to notify others by calling on their mobile phones. It is no longer necessary to agree on when and where to meet.

People can just call each other on their mobile phones and say where they are at the moment. People tend to have a love-hate relationship with their phones, loving the sense of freedom they give, or the technology itself, or the status they believe an expensive phone confers. However, at the same

time they hate the sense of being tied to work by the phone, never able to be out of contact. Some people hate the way others use their phones: from the loud businessperson shouting on the train to the teenager playing their tinny music at the back of the bus.

Mobile phones have also been accused of ruining our language. Text messaging, and the need to make messages short, meant we developed new ways of spelling. Txtspk has been blamed for damaging the English language and even affecting literacy levels. the frequency of use of texting has now overtaken the frequency of every other common form of interaction with their friends. Fully two-thirds of teen texters say they are more likely to use their cell phones to text their friends than talk to them to them by cell phone.

In theatres, cinemas and restaurants new rules of etiquette have been introduced. When is it OK to answer a phone when in the company of others? Most people would agree that answering a phone during a theatre performance is the height of rudeness, but it still happens. As with so many previous technological revolutions - from the steam train and motor car to rock music and computer games - the mobile phone is both loved by many and blamed by the few for society's ills. * Discuss how the advancement affected the world (insert author and date)

Throughout history, certain events have taken place that dramatically changes the future. These changes not only occur locally, or nationally, these events can result in a global amend. Telephone has served as an aid for physicians, police, fire, and emergency workers since it was established for

public use. phones have allowed social decentralization, resulting in a movement out of cities and more flexible work arrangements. Businesses interconnected globally through wireless internet services provided on cell phones are changing not only marketing but also politics.

The introduction of cameras on phones has helped create a generation of citizen journalists; protesters in Middle East have help further democracy and become a tool for grassroots organizers. This has allowed for feedback that is more public, making the world smaller, increasing contact between peoples of all nations and thus fostering world peace. The wireless cell phones also lead to additional advances in networked communications. Instant messaging has caused the postal service to lose business, but has open up new job opportunities on telecommunication.

Telephone has lead to an advanced form of the transmission of intelligence.

IV. Evolution if the Advancement * Discuss how the advancement has

evolved (insert author and date) The telephone was all but cumbersome.

When someone was to make a call, the caller had to go through an operator to connect the caller to another party. The telephone was also better at receiving than transmitting. The microphone was not sensitive enough.

There were also switchboards in which an operator had to manually remove one socket to connect to another.

As the demand of telephone use grew, the need to replace the switchboard system had to be done. When the telephone progressed, so was the subscription of service. From the time of its invention to 1880, there were 50000 subscribers of the telephone (Cason, 1910). However, it took nearly a

hundred years for the system to improve dramatically. The operators were eliminated because the users could now make their own connection without calling the operators first. The more the telephones improve, the more the people wanted more from it. In the twentieth century, the telephone is the main.

The concept of mounting both the transmitter and the receiver in the same handle appeared in 1878 in instruments designed for use by telephone operators in a New York City exchange. The earliest telephone instrument to see common use was introduced by Charles Williams, Jr. , in 1882 (Boettinger, 1983). Designed for wall mounting, this instrument consisted of a ringer, a hand-cranked magneto (for generating a ringing voltage in a distant instrument), a hand receiver, a switch hook, and a transmitter. Various versions of this telephone instrument remained in use throughout the United States as late as the 1950s (Boettinger, 1983).

The traditional rotary dialer, invented in the 1890s, is rotated against the tension of a spring and then released, whereupon it returns to its position at a rate controlled by a mechanical governor. Desk instruments were first constructed in 1897. Patterned after the wall-mounted telephone, they usually consisted of a separate receiver and transmitter. * Discuss effects of advancement on later time periods (insert author and date) In 1927, however, the American Telephone & Telegraph Company (AT&T) introduced the E1A handset, which employed a combined transmitter-receiver arrangement (AT&T, 1992).

The first telephone to incorporate all the components of the station apparatus into one instrument was the so-called combined set of 1937 (Brock, 1981). Some 25 million of these instruments were produced until they were superseded by a new design in 1949. The 1949 telephone was very new, incorporating significant improvements in audio quality, mechanical design, and physical construction. Push-button versions of this set became available in 1963 (AT&T, 1992). Beginning 1980's cordless telephones took the place of a telephone instrument within a home or office and permit very limited mobility—up to a hundred meters.

Because they communicate with a base unit that is plugged directly into an existing telephone jack, they essentially serve as a wireless extension to existing home or office wiring. The first cordless phones employed analog modulation methods and operated over a pair of frequencies. When the Bell Telephone Company finally got going the company strongly held its patents so it will exclude others from the telephone business. After these patents expired in 1893 and 1894, independent telephone companies started up in many cities and most small towns (AT&T, 1992).

A period of combining happened in the early 1900s, and there was eventually about 80 percent of the customers in the United States and a lot of those in Canada were served by AT&T. AT&T bought the Bell Telephone Company in year 1900 (AT&T, 1992). For decades a near dormant technology, became the dynamic and perhaps most important communication tool of our lives. Commercial mobile telephony began in 1946 (Brock, 1981). Public mobile telephone history begins in the 1940s after World War II (Brock, 1981).

Although primitive mobile telephones existed before the War, these were specially converted two way radios used by government or industry, with calls patched manually into the landline telephone network. Many New York City fireboats and tugboats had such radiotelephones in the 1930s. These were private services. Commercial mobile telephony began in 1946. Mobile telephone a wireless device connected the public switched telephone network and was offered to the general public by a common carrier or public utility. The mobile phone has become the favored communication hub for the majority of American.

V. Conclusion * Recap thesis statement The importance of Alexander Graham Bell on today's society is visible, or rather audible, everywhere. Developments in tone dialing, call tracing, music on hold, and electronic ringers have greatly changed the telephone. This marvelous invention allows us to communicate with the entire globe 24 hours a day. Without the telephone, progress would have been much slower and people might not have been so receptive to change. Bells invention served humankind well, and will continue to offer society a valuable service for years to come. Close with general statements of how the advancement affected the humanities and the world in general Probably the most interesting phenomenon, however, is that the mobile phone has freed us from the constraints of space. It is of course just an unfortunate circumstance that mobile phones were not available at the beginning of our existence on the savannah. If they had been, then man surely would have phoned home to the cave and said: "Light the fire, honey, because I'll be home soon with half a lion. In the final analysis, mobile telephony is not a matter of radio waves and electronics,

but rather human communication. We need to talk to each other, and that need has been paramount from the day we stood up on two legs.

Communication is vital for our survival. Without talking to each other, the inventions of telecommunications would cease to exist along with society.

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