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Cultural Artifact

Freedom At Last

There are over 300 million people in the United States (“Public Data”), of these, approximately 250 million subscribe to some form of cell phone plan (Stevens). To put this into perspective, four out of every five people use a cell phone. The cell phone was not always around, and before 1973 there had never been a call placed from a cellular device (“Martin Cooper”). The first cellular call would be the beginning of a dramatic evolution in the technology, economy, and social atmosphere of the United States.

One of the world’s greatest inventions was created on March 10th, 1876. This invention was the telephone. It was not the telephone that sits on the desk or in a purse today but a much simpler version. This invention changed history by essentially killing the telegraph, and it has not stopped progressing for over a century. The telephone began its lifespan with a controversial opening. The telephone was invented by separate individuals and patented by both parties within a few hours of each other. The first patent was granted to Alexander Bell and the second was for Elisha Gray. Bell was first with his patent and he won by a matter of a few hours. The technology was primitive, but Bell was onto something (Bellis).

The advancements with the telephone did not end there. In 1910 a Swedish Engineer, Lars Magnus Ericsson, decided to make the technology more useful. Ericsson is credited with creating the first car phone. He placed a phone inside his vehicle, and he traveled cross country. Along the way, Ericcson would stop and connect to the telephone wires. Granted, this was not a true car phone, but it was an improvement to the original telephone. Over the next fifty years, towers were placed so that signals could be sent and the technology continued to progress. Car phone service advanced and became popular in the early 1970’s (Agar).

By 1973 communication had improved greatly and the majority of the nation had phones in their homes. Communication was limited to inside buildings or vehicles. At times, waiting for a phone call could be an inconvenience. The cost of calls was also expensive. There was no free nationwide long distance, and an international call during the 1970’s could run over $2.40 per minute (“PPI: The Average Cost of an International Phone Call”). Over the course of history, communication has had an impact on the social and economic aspects of people’s lives. One man understood this concept and spent his life trying to develop the technology.

Dr. Martin Cooper was born December 26th, 1928 in Chicago, Illinois (Leard). Many people are not aware of whom Dr. Cooper is, but the lives of everyone in the United States have been affected by what he has accomplished. He graduated from the Illinois Institute of Technology in 1950 with a degree in Electrical Engineering. Several years later, Cooper began working for Motorola. During the 1960’s Dr. Cooper worked under John Mitchell for Motorola’s mobile communications department. He was instrumental in developing the technology in beepers. His work within the department changed the distance a beeper could function from within a building to many miles. Cooper continued his education for many years while he worked at Motorola. Throughout the 1960’s, he was a valuable team member for many of Motorola’s developments. His greatest invention would not occur until 1973 (“Martin Cooper”).

In the early 1970’s Dr. Cooper was placed in charge of car phone research division at Motorola. This led Cooper to envision a world where phones were not limited to vehicles or homes. He knew that it was only a matter of time before they could produce a portable product. Cooper had researched portable electronics while employed with Motorola for many years. He put his extensive knowledge to work and in only ninety days he was able to create the first portable cell phone prototype (“Father of the Cell Phone”). This cell phone looked nothing like the ones of this decade, but it worked. Dr. Martin Cooper placed the first cell phone call on April 3, 1973. The call was placed to his competitor, Dr. Joel Engel, head of research at Bell Labs (Shiels). This phone call would be the beginning of communication as we know it today.

The original cell phone was very large, bulky, and expensive. It took many years for the population to catch on, but it was only a matter of time before the cell phone would become a necessity. Over time, the technology advanced, and the phones would become smaller, a little less expensive, and more efficient every year. People saw their lives changing. Martin Cooper is quoted as saying, “People want to talk to other people - not a house, or an office, or a car. Given a choice, people will demand the freedom to communicate wherever they are, unfettered by the infamous copper wire. It is that freedom we sought to vividly demonstrate in 1973 (“Martin Cooper – History of Cell Phone”).” Martin Cooper was right and people did demand the freedom to communicate.

The first city to experience the freedom of communication was Chicago. In 1974 phone companies received a big push to continue their research in cellular phones. Even though Motorola was the first company to successfully make a cell phone call, AT&T was the first to design and unveil a cellular plan for Chicago. Over the course of the next decade companies would test and monitor the results of the usage. The government stood by cautiously, watching a very profitable industry develop. All of the hard work paid off and in 1988 the Cellular Technology Industry Association is created. This would be the official creation of the cellular empire (Keith).

The cellular empire has been a cornerstone of our economy since its creation. The market grew faster than any business could have dreamed by quickly becoming the next “it” product and staying so for decades. In 2008, Verizon Wireless, only one of the top cell phone providers, reported over $49 billion in sales (“Portions of Verizon’s Report to Shareowners”). Verizon also claims to employ over 220,000 employees (“Portions of Verizon’s Report to Shareowners”). As astronomical as these numbers are it is only a portion of the industry. This product diminished the importance of the telegraph, the pay phone, and is slowly conquering the traditional land line. The nation has become somewhat of a cellular addict. The freedom in communication allows people to stay in touch with their family or keep in touch with the office from thousands of miles away. Every year the technology continues to advance.

Cell phones are no longer just used for talking and every day the cellular empire challenges another industry to survive. Over the past twenty years the mobile web was invented (Kwan). The need for a personal computer was slowly diminished with the new web capabilities. It is possible to check email or visit popular websites with a click of the phone. Younger generations have experienced the most dramatic change in communications with the creation of text messages. Children are now receiving cell phones at extremely young ages, and the effects of the cell phone are clearly visible in their social skills. There is no longer a necessity to speak to others. Entire conversations can be shortened with a few simple text messages. The cellular devices now have cameras, essentially slowly replacing the need for a digital camera. These phones are able to download games, store notes, and play music; the list goes on and on. At this point the possibilities are endless and it is only a matter of time before cell phones evolve further.

The cell phone industry has been around for approximately forty years and with the country’s current addiction to the technology, will probably be around for over another forty years. There is no way of knowing when or if the cell phone will be replaced by the next new “it” product, but the impact of the cell phone will always be part of our history. One invention single handedly restructured our technological, economic, and social atmosphere forever.

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