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DISTANCE IS DEAD.

In 1858, Queen Victoria sent a telegram via the Atlantic Cable to United States President James Buchanan. The transmission took 16 ½ hours. Without the cable, such a dispatch in one direction alone would have taken twelve days.

Today, data transmission is sent at the speed of light – via satellite – at 186,000 miles per second. Even though the satellites could be as far away as 22,000 miles, transmission usually takes only 500 to 900 milliseconds to travel back and forth.[1]

http://atlantic-cable.com/stock.htm
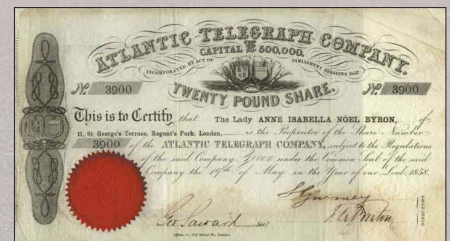
A lot has changed in 150 years. In fact, a lot has changed in the span of most marketing researchers' professional lifetimes. Consider the advances that have happened in the span of a baby-boomer's existence. Capitalizingon wartime advances in research on semi-conductors, the transistor was invented in 1947. In 1957, the Soviet Union stunned the world when it launched Sputnik I, the world's first artificial satellite. As it flew overhead, every 90 minutes a tiny sequence of radio beeps was directed toward the United States. 1959 saw the invention of the integrated circuit. At his desk at Texas Instruments one summer, a newly hired researcher, Jack Kilby, pondered the problem of their excessive size and the wires attached to transistors while his colleagues vacationed. In less than six weeks, Kilby built a working model of the first "solid circuit," made out of silicon.

Image from CollectorsWeekly.com

In 1962, J.C.R. Licklider envisioned a "Galactic Network," and as Federal Director of the Information Processing Techniques Office at the Pentagon, put in place the funding priorities which would allow for the development of the ARPANET, the precursor to the Internet. In 1964, Thomas Watson, Jr. IBM's leader, assumed a huge risk by developing the System 360, the world's first general purpose, mainframe computer. While the rest of the American scene was exploding with cultural transition, in 1968, Gordon Moore and Robert Noyce founded Intel, roducing a chip of less than ¼ inch in size, on which an entire CPU (central processing unit) is embedded. Everyone knows: *Intel Inside*.

The grandfather of our modern day Internet was born in 1969. Commissioned by the U.S. Department of Defense, ARPANET protected the flow of military and national security data through a network of geographically separated computers via the newly developed Network Control Protocol (NCP), later upgraded to IP (Internet Protocol). The advanced IP technology allowed data to be put into an electronic "envelope" addressed and delivered to another computer.

1971 saw the world's first electronic mail (email) message. To distinguish between messages, the inventor, Ray Tomlinson, chose the @ symbol to indicate that the user was at some other host rather than being local.

Distance-defying history continued. 1975 saw the launch of the Altair 8800, the world's first personal application: computer. 1979 saw the development of the first spreadsheet application: VisiCalc.

1984 saw the launch of the Mac – the first graphical user interface PC. 1991 saw the development of the World Wide Web by Tim Berners-Lee. Mosaic, the first graphical browser, was launched in 1993, and in the same year, the White House went online for the first time. 1994 saw the emergence of online directory services, and by 1996 a war for dominance in the browser market was alive and well between Netscape and Microsoft. 1999 revealed the first real disruption in distribution chains, with the emergence of Amazon and eBay.[2]
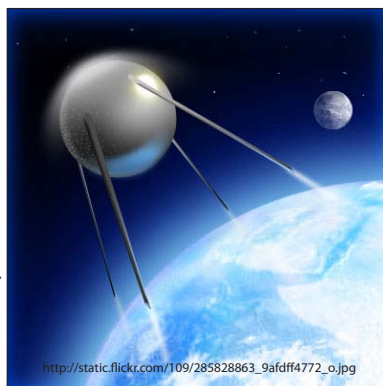
http://static.flickr.com/109/285828863_9afdff4772_o.jpg

Today, e-commerce is commonplace. In the 20th century, it became practicable to move objects, including people, around the world at near the speed of sound and at moderate cost with previously unimagined safety. It is now feasible to move information in a similar fashion, but literally at the speed of light. [3]

The growing ease and speed of communication is creating a world where the miles have little to do with our ability to work or interact together. Geography, borders, time zones - all are rapidly becoming irrelevant to the way we conduct our business and personal lives. [4] In short, we are entering a new phase in the evolution of the Internet: the "Meganet". [5] The global communications network will (eventually) connect everyone on earth.

Image from BrisbaneTimes.com.au

Microsoft Chairman Bill Gates observed that "the Internet will be to the 21st century what aviation was to the 20th century."[6] We are now in the age of "Telepresence" - defined as a human experience of being fully present at a live real world location remote from one's own physical location.

Telepresence can establish a sense of shared presence among geographically separated members of a group. Someone experiencing Telepresence can behave and receive stimuli as though part of a meeting at a remote site.

Visual collaboration solutions now closely replicate the brain's innate preferences for interpersonal communications. These cues include life–size participants, fluid motion, accurate flesh tones and the appearance of true eye contact. [7] In fact, the CAT scans of patients in a number of US hospitals are routinely read by radiologists in Australia or Bangalore. A patient in Strasbourg, France, had his gallbladder removed by a surgeon in New York who was using a remotely controlled robot. [8]

Thomas Friedman, author of the New York Times bestseller, The World is Flat, sums it up: we must learn how to learn, teaching ourselves to stay curious and innovative, if we are to excel in a global economy. [9] Marketing researchers already know how to do this: by being continuously interested in how people think, in how they use products and services, and in what motivates their behavior. That already puts them a step ahead.
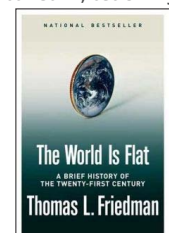
1 http://www.hughesnet.ezsatellitenow.com/index.php, Sept. 2009.
2 2001: A Cyberspace Odyssey, Rebecca West. Published as a project with Greenwich Academy, Greenwich, CT, 2001.
3 Is America Falling Off the Flat Earth? , National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2007
4 The Death Of The Distance, Frances Cairncross, Harvard Business School Press, 2001.
5 Meganet: How The Global Communications Network Will Connect Everyone On Earth, Wilson Dizard Jr, Center for Strategic and International Studies, Washington D.C.
6 Ibid.
7 http://en.wikipedia.org/wiki/Telepresence#Teleconferencing, Sept. 2009.
8 Is America Falling Off the Flat Earth? National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2007
9 The World is Flat, Thomas L. Friedman, Picador, 2005.