

allowed any two nodes to easily interact with each other, which is still the basis of all communication that takes place on the Internet. Stewart states that the ARPANET was initially only made up of four nodes, but it eventually expanded to over one hundred nodes before it gave way to newer implementations of the Internet in 1990 (Stewart). The Information Age, and, more specifically, the Internet, created a means of communication that guided modern global industrialization and economic fluidity.

The Industrial Revolution and the Information Age both created new financial opportunities for individuals. Gregory Clark, an economic historian at University of California, Davis, writes in his book, *A Farewell to Alms - A Brief Economic History of the World*, that “[t]he Industrial Revolution was driven by the expansion of knowledge. Yet, stunningly, unskilled labor has reaped more gains than any other group. . . . Thus modern growth, right from its start, by benefiting the most disadvantaged groups in preindustrial society, particularly unskilled workers, has reduced inequality within societies” (Clark 272-273). Because laborers in factories of the Industrial Revolution did not need to be skilled with a particular craft, workers with little knowledge of their industries could still find work on assembly lines in factories. The Information Age takes the spread of opportunity in another direction. Pamela Parker, a journalist who is often involved with Internet marketing, reports that “[t]he Interactive Advertising Bureau (IAB) has released a study showing that the ad-supported Internet is responsible for 5.1 million jobs in the U.S. and contributed \$530 billion to the economy in 2011” (Parker). Individual bloggers or website owners can make ad revenue off of their websites, outweighing the costs of maintaining the websites. This revenue has a big impact on individuals’ lives, providing a new source of income, either in addition to another job or as a full-time job itself.

Both of the time periods provided openings for individuals to find jobs that they would not have otherwise been able to obtain. Uneducated factory workers did not have other methods of supporting themselves, because their lack of skill prevented them from finding jobs. Since public education was essentially unheard of in England until after the Industrial Revolution, unskilled workers did not have easy means of acquiring the knowledge that they would need to find jobs. Owners of small websites during the Information Age do not need much experience to maintain the websites. There are many tools available that make it easy to set up a blog or video channel with only the ability to write or record content. Ad revenue also funds larger companies that will use their profits to hire new employees. The Internet, as Pamela Parker reports, is the collective source for 5.1 million jobs in the United States. Both uneducated factory workers and unskilled bloggers benefit from the time periods they live in, because they can be productive and provide for themselves even without the expertise that would otherwise be required of them.

Both the Industrial Revolution and the Information Age improved the accessibility of long-distance communication. Victor Jones, a professor at the School of Engineering and Applied Sciences, Harvard University, writes about “a complex telegraphic system, based on an electrochemical current, [that] was designed and demonstrated before the Munich Academy of Science by Samuel Thomas von Sömmering (1755-1830). . . . At the receiving end each wire is connected to one of a series of thirty-five electrodes that are immersed in an acid bath. Completion of the circuit caused the evolution of bubbles of hydrogen at the electrode corresponds to a particular letter or a number” (Jones). Though it does not share many characteristics with later telegraphs, this telegraph, built in 1808-1810, was one of the first ways to quickly send messages across distances of