



As We See It

“History does not repeat itself, but it rhymes.”

– Mark Twain

In the February 21, 2000, *Forbes ASAP*, John Steel Gordon writes, “The Internet in the 1990s is just like the railroad in the 1840s. It is still in its infancy, its growth is exploding, and no one yet knows how to make money at it. It also performs the same economic function: connecting things. And there is no more potent force than connecting buyers and sellers. The GDP of an economy, after all, is nothing more than the sum of all these connections. The more buyers and sellers there are, the greater the wealth created. That’s why the railroad was the seminal invention of the 19th century and the Internet will undoubtedly be of the 21st.”

Prior to the railroads, overland transportation of goods was slow and expensive as roads were practically nonexistent. The only economical way to transport most goods was over water. Unfortunately, most East Coast rivers were navigable for only short distances and flowed mostly north to south. The early remedy to this situation was a series of canals of which the Erie Canal was the most prominent.

With the development of the railroad, man conquered space and time. Travel times and freight movement improved significantly. For example, travel time from Washington, D.C. to Nashville was reduced from one month to three days. According to Stephen E. Ambrose, author of *Nothing Like it in the World*, the first transcontinental railroad reduced the cost and time of travel significantly. “Before, it took months and might cost more than \$1,000 to go from New York to San Francisco. But after Promontory, a man or woman could go from New York to San Francisco in a week, and the cost, as listed in the summer of 1869, was \$150 for first class, \$70 for emigrant.”

Freight rates by train also fell incredibly. Before the arrival of the railroad, shipping a ton of goods a significant distance could easily quadruple the price. But by rail, the same ton of goods could be shipped in a fraction of the time and at one-twentieth the cost. This made for a much larger world. “Two generations ago,” wrote Arthur Hadley, a Yale economics professor, in 1885, “the expense of cartage was such that wheat had to be consumed within 200 miles of where it was grown. Today, the wheat of Dakota, the wheat of Russia, and the wheat of India come into direct competition. The supply at Odessa is an element in determining the price in Chicago.”

While the railroads improved the efficiency with which people and goods were moved, it is information and data that can be moved much more quickly and cheaply by the Internet. According to a Morgan Stanley Dean Witter report, buying airline tickets over the Internet results in an 87% reduction in the distribution cost. Banking online is an 89% reduction.

Like the Internet in our time, the new economy that emerged in the railroad’s wake brought sweeping economic and social change. Instead of each village blacksmith making horseshoes from scratch, one factory could produce horseshoes by the hundreds of thousands at a fraction of the cost per unit. Largely due to the benefits of reduced transportation costs and the benefits of consolidation, the cost of manufactured goods fell relentlessly during the 19th century.

Not unlike the Internet of recent years, the railroads overbuilt wildly in the decades after the Civil War. In the 1880s and 1890s two-thirds of the railroad tracks in the United States passed through receivership and were reorganized according to Gordon. The Internet appears to be going through a similar shakeout.

Eventually, that shakeout will end in a profitable industry consisting of fewer large companies. Moreover, as with the railroad, the Internet will transform commerce in ways yet to be determined. In the process, investment risks and opportunities will proliferate.

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