

Ford Model T

Mr. Ford's "Universal Car"

Henry Ford (1863-1947) was a farm boy. He knew how arduous farm chores could be. And he loved tinkering with mechanical gadgets. Eventually, he helped develop the modern farm tractor. His incessant tinkering also played an essential role in the creation of the Model T.

At the beginning of the 20th century, many types of automobiles were under development worldwide. Some had internal combustion engines; some used electric batteries. But autos were difficult and expensive to build and to maintain. They were playthings for enthusiasts or rich people. Outside the major cities, paved roads and qualified mechanics were rare, even in the United States. The railroad was the chief means of long-distance travel. For short distances, the horse-and-buggy was still common.

Fast-forward to America after World War II. A land of highways and shopping malls. How did this change come about?

Henry Ford invented neither the automobile nor mass production. He was not even the sole designer of the Model T. But he was a genius at bringing together ideas and people. He had a vision. To achieve it, he tirelessly sought to make improvements, both in the product and in the production process.

When the Model T debuted in 1908, it offered many innovations, superior engineering, and high-quality materials. For example, it had a three-point suspension system that helped it get out of potholes and ditches. It had lightweight steel casings to protect the crankcase and transmission.

In 1913, the Ford Motor Company introduced the world's first moving assembly line. This meant increasing automation, interchangeability of parts, and division of labor. The results were consistency, efficiency, and lower costs to both producer and consumer. The downside, of course, was the boring, repetitive nature of assembly-line work. Charlie Chaplin satirized this in *Modern Times*. But in 1914 Ford introduced another revolution: the Five Dollar Day. This reduced the work shift to eight hours while effectively doubling workers' pay.

In 1908, Ford produced less than 10% of cars in the U.S. In 1914, Ford's 13,000 employees produced almost as many cars as the 66,000