

Then: The Industrial Revolution

by Sophia Tutorial

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WHAT'S COVERED

In this lesson, you will learn about the Industrial Revolution. The United States didn't start the Industrial Revolution but in many ways we used it and advanced it more than any other country. The United States exploited free slave labor, cheap immigrant labor, vast resources acquired through western expansion via the removal of Native Americans from their land, and a "can do" spirit to become the most industrious country ever. Specifically, this lesson will cover:

- 1. The Industrial Revolution
- 2. Inventions That Defined an Era
- 3. Mass Production



BEFORE YOU START

How did the Industrial Revolution change the workplace?

1. The Industrial Revolution

Let's look back into the past to a period when the nature of work changed dramatically: the Industrial Revolution. Like the Information Age, the Industrial Revolution was a time when the invention and adoption of new technologies led to different ways of working. By examining the Industrial Revolution, we can learn how people used their agility skill to adapt to change and be successful during historical transitions.

The Industrial Revolution is the name for a period of great change that took place in the 18th and 19th centuries. It began in Britain in the 1760s and started to bring large-scale changes to the U.S. economy and workforce starting in the early 1800s.

Before the Industrial Revolution, many people were farmers who grew food that fed their families and gave them income. Products like clothing and tools were typically made on a small scale, in artisans' workshops or in people's homes. In the 1760s, however, a burst of innovation brought the invention of new machines, most notably James Watt's improved steam engine. These machines led to the growth of factories—a new kind of workplace with a new way of working.

After the Industrial Revolution, many more people held manufacturing jobs. In 1800, over 80 percent of Americans worked directly in agriculture; by 1850 this number had declined to 55 percent (Digital History, n.d.). Now, in the 21st century, it is less than 2 percent (Roser, 2013)! The Industrial Revolution brought one of the biggest changes in human history in the way people worked, affecting almost every aspect of their lives, from where they lived to how they traveled to what they are and wore.



TERM TO KNOW

Industrial Revolution

An era of rapid transformation that lasted from about 1760 to 1840 in Great Britain and from about 1790 to 1900 in the United States. New technology and production methods led to an economic shift from farming to manufacturing.

2. Inventions That Defined an Era

The Industrial Revolution occurred because of the invention of new technologies, such as machine tools, steam power, factory production, and electric power. This had a ripple effect on the entire economy. These new inventions meant that goods could be produced in factories and brought to markets (sometimes in far-flung locales) more efficiently and quickly than ever before. To adapt to this major shift in the nature of work, many people developed new skills, learning how to operate the machines in the factories or mastering the new production and distribution processes.

Let's look at a 1904 primary source that shows a factory run by the Westinghouse Electric and Manufacturing Company in East Pittsburgh, Pennsylvania. Remember, even when you're examining a source that's an image or film, think like a historian! Look closely at the details of this workplace—notice what kinds of people you can see and what those people are doing.

Technological change was the defining element of the Industrial Revolution, as steam power, electricity, automation, and railroads led to new possibilities and massive shifts in the way people lived. By looking back at some of the people who embraced these changes, we can see how new technologies presented new opportunities.

3. Mass Production

The story of Henry Ford and his use of mass production is an iconic example of entrepreneurial savvy meeting technological innovation to redefine an industry. Ford's popular Model T car is still famous today, but his groundbreaking use of the assembly line influenced companies and workplaces far beyond the automotive industry. Under Ford's system, an entire car could be built by a series of people, each one completing the same task over and over again. They used interchangeable parts and a division of labor to build cars more quickly and cheaply than ever before (Flink, 2000). Ford had the vision to mass-produce automobiles at a time when most people still traveled by train or horse, and he developed a novel system to meet the demand for his product.



Workers on the first moving assembly line put together magnetos and flywheels for 1913 Ford automobiles in Highland Park, Michigan



The Industrial Age profoundly changed how people worked and what kinds of work they did. In the next lesson, we'll take a look at how people used agility to respond to the changes brought by industrialization.

SUMMARY

In this lesson, you learned that **the Industrial Revolution** was a prolonged period of technological progress that drove significant economic shifts in the primarily agricultural United States. Manufacturing took center stage in the 19th century, as **inventions that defined the era**, like machine tools, steam and electric power, and factories, allowed for the **mass production** of consumer goods. Entrepreneurs like Henry Ford and others harnessed the technology of the Industrial Revolution to fundamentally reshape how Americans lived and worked. Best of luck in your learning!

Source: Strategic Education, Inc. 2020. Learn from the Past, Prepare for the Future.

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ATTRIBUTIONS

Workers on the first moving assembly line put together magnetos and flywheels for 1913 Ford automobiles in Highland Park,
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