

Self-Guided  
Itinerary

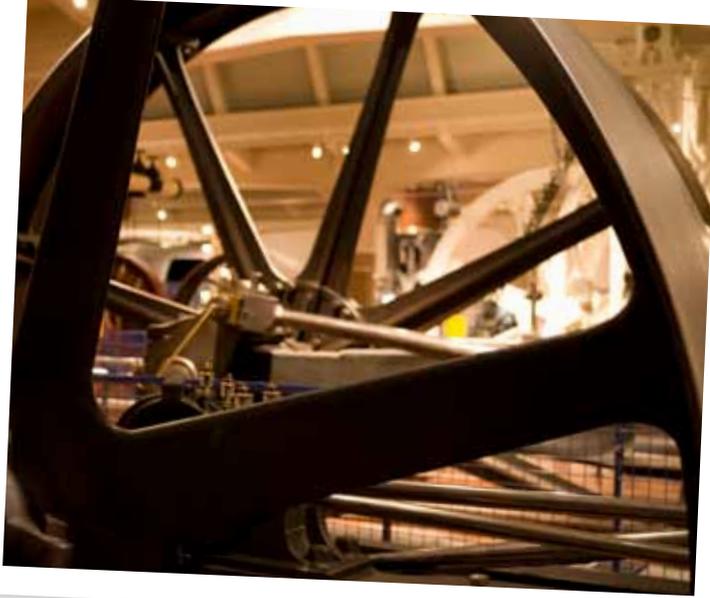


# Through the Lens of Innovation

## Henry Ford Museum®

Henry Ford was one of America's great innovators. In the 1920s he set about collecting examples of innovations at work in people's daily lives, especially in the United States. The purpose of this itinerary is to help you identify the innovations on display here in The Henry Ford.





## INVENTION VS. INNOVATION

The Henry Ford defines **invention** as the creation of something new; a new idea, product, or process that has never existed before. Inventions are not always successful, creating something new does not necessarily mean that anybody will use it. The process of **innovation** involves improvement, adaptation, and adoption. Widespread adoption is what makes an innovation successful.

## INVENTIONS BUT NO INNOVATION

### REFLECT AND DISCUSS

While visiting the Made in America exhibits see some of the artifacts below to learn why some inventions do not become successful innovations.

Located near the cobbler shop in the **Made in America – Manufacturing** exhibit:

- The Domestic Spinning Jenny
- Foster's Printing Press

Located in the **Made in America – Power** exhibit:

- Objects in the Water and Wind Power section (near the windmill)
- Electric arc lamp (near the large red “Edison General Electric” dynamo)

What needs led to the creation of these inventions? Why did these inventions not become widely adopted innovations?

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### EXPLORE MORE

Visit the **Dymaxion House** (between Your Place in Time Exhibit and the Museum Gallery) to find out why this peculiar house was not adopted as the innovation that its creator had hoped it would be.



# THE CHARACTERISTICS OF INNOVATION

According to Everett M. Rogers, in order for an innovation to succeed on a large scale, it has to meet five criteria:

- Relative advantage
- Compatibility
- Complexity/Simplicity
- Observability
- Trialability

## REFLECT AND DISCUSS

### 1. Relative Advantage

An innovation is something we perceive as better than what we already have. “Better” can mean improved performance, cost/labor savings, safety, or even just its novelty.

Visit the McCoy Steam Engine Lubricator (in the **Made in America-Manufacturing** exhibit, across from the cobbler shop) OR the Pratt Whitney Wasp Engine (in the Entrepreneurs section of the **Heroes of the Sky** exhibit).

What relative advantages did this machine provide over the competitors already on the market? Did it improve performance, save costs or labor, or increase safety? Or was it just something new?

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### EXPLORE MORE

Visit the Domestic Cotton Gin, Carding and Spinning Machine in the Picking and Processing section of the **Agriculture** exhibit. What advantages did this device offer over previous methods of preparing cotton?

### 2. Compatibility

An innovation is more likely to be successful if it is compatible with the existing values, past experiences, and needs of potential adopters.

Visit the **Clockwork** hallway near the museum cornerstone

What needs are met by owning a clock? What change in American values turned owning a clock from a luxury to a necessity? What changes enabled people to afford having clocks in their own homes?

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### EXPLORE MORE

In the **Driving America** exhibit, visit the Henry Ford section and try the “Help Henry Innovate” activity on the touch-screen interactive kiosk to see how Henry Ford used the values, experiences, and needs of consumers to adapt his products.

### 3. Complexity / Simplicity

Simple to use, easy to understand innovations are more likely to be adopted than those that are too confusing to their intended audience.

Visit the Hybrid Cars case in the Power Options section of the **Driving America** exhibit.

How have innovations since the 1916 Woods Dual-Power hybrid coupe increased the simplicity of hybrid vehicles and allowed them to become more widely adopted?

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### DID YOU KNOW?

Part of the appeal of the Model T was that it was considered relatively simple to operate. On the touch-screen interactive kiosk in the Henry Ford section of the **Driving America** exhibit, you can try the “Test Drive a Model T” activity to determine whether or not simplicity in automobiles has increased or decreased since the Model T.



#### 4. Observability

An innovation will be more successful if its positive results are visible to potential new users.

Visit the Products and Promotions, 1850-1900 section of the **Made in America - Manufacturing** exhibit OR the “American” Cow Milker case in the Picking and Processing section of the **Agriculture** exhibit.

What new methods did manufacturers and retailers use to increase observability and sell goods?

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#### EXPLORE MORE

Visit the Marketing section of the **Driving America** exhibit to see how marketing highlights the benefits of automobiles.

#### 5. Trialability

The easier it is for the user to experiment with an innovation the more their confidence in the technology will grow and the more likely they are to fully integrate the innovation into their lives.

Visit the “Testing the Limits” case on the Timeline in the Driving America exhibit.

What made radio, flying and driving trialable for many young men during the early 1900s?

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Visit the 1980-1999 Timeline section in the **Your Place in Time** exhibit. Look at these technologies and think about how they have inspired further innovations that we use every day.



Today, manufacturers and retailers use trialability to market new developments in technology to potential customers. From your own experience, what are some examples of how people can “try before they buy”?

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#### DID YOU KNOW?

Many early Edison phonographs were purchased by entrepreneurs who traveled around the country demonstrating them at fairs and festivals. For a fee, people who could not afford to purchase a phonograph could see how one worked.

