

# **Scientific Management**

**B0544255 許懿傑**

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# The Author

Frederick Winslow Taylor

弗雷德里克·溫斯洛·泰勒

1856—1915

1874, incomplete Harvard degree, due to rapidly deteriorating eyesight

1875, Taylor became an apprentice pattern maker and machinist

1878, he started the research of labor time and the working method

He focused on the human component of production  
also known as analyze the productivity of both the men and the machines

# The Author

Frederick Winslow Taylor

弗雷德里克·溫斯洛·泰勒

1856—1915

1882, Taylor started to put the first features of scientific management into operation.

1883, he became a student of Stevens Institute of Technology, obtaining a degree in mechanical engineering.

1895, his first paper, *A Piece Rate System*, was presented to the American Society of Mechanical Engineers (ASME).

1895, he also mentioned the system called “**Piece Wage**”

1898, experiments with “**Pig Iron**”, “**The Science of Shoveling**”, “**Bricklaying**”

# The Author

Frederick Winslow Taylor

弗雷德里克·溫斯洛·泰勒

1856—1915

1903, published “Shop Management”

1906, Taylor was awarded an honorary degree of Doctor of Science  
by the University of Pennsylvania.

1911, Taylor introduced his “The Principles of Scientific Management” paper to the ASME  
eight years after his Shop Management paper.

1915, Taylor has passed cause pneumonia.

# The Structure of Theory

## The 4 Principles should be followed in Scientific Management

1. **Scientific Method** - focus at a person, and segment the job, turns out the scientific rules instead of past experiences.
2. Use the science to **select, train**, educate, develop the job.
3. Make sure the job will do in the right science way with the workers.
4. Train supervisors to **support** workers.

# The Structure of Theory

## Science

- . Rules of motion
- . Standardized work implement
- . Proper working conditions

## Select Workers

With the right ability for the job

## Train Workers

## Support Workers

# Application and Influence

## **United Parcel Service, UPS**

Use the scientific management to track and avoid the wasted time.

And also calculate the shortest delivery routes.

## **Explicit Procedures For Drivers**

Kinds of the artificial intelligence which help people to use the data and analyze.

Give us the routes which avoid left turns, unbuckle seat belt with left hand, ... etc.

## **Motion Study**

In the simple way to describe this study in nowadays, it will be very similar as robots.

In the past, we pursue high productivity, but in other hand, is this good for people ?

Maybe it' s good for company, or economy, but how about the workers ?



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