

# Statistical Thinking for the 21st Century

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## Chapter 1

### Introduction

“Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.” - H.G. Wells

#### 1.3 What can statistics do for us?

There are three major things that we can do with statistics:

- *Describe*: The world is complex and we often need to describe it in a simplified way that we can understand.
- *Decide*: We often need to make decisions based on data, usually in the face of uncertainty.
- *Predict*: We often wish to make predictions about new situations based on our knowledge of previous situations.