# Unit 8: Analysis What is analysis?

Lesson 53
Derek Ruths

## **Overview of unit**

#### Objectives:

- Understand the philosophy of analysis
- Learn strategies for approaching data analysis
- Know major areas of data analysis and what questions they answer
- 1. What is analysis?
- 2. What is a result?
- 3. Most frequent word analysis
- 4. Statistical analysis

## **Lesson overview**

### **Objectives**

- Understand the objective of analysis
- Understand why analysis is both science and art

#### **Outline**

- Reaching and substantiating insights
- The science of analysis: answer questions
- The art of analysis: asking more questions

## **Substantiating insights**

## **Answering questions**

- Select (or build) a tool
- Prepare data
- Apply tool to data
- Sanity check results

Results often raise more questions...

i.e., "Yes, but..."

## **Asking questions**

It's important to recognize when you need to follow up on questions raised.

This is art! Similar to proofs...

For the follow-on question...

- Is the answer obvious?
- Would the answer impact the validity/relevance of result we have to the insight sought?

## Beware of "fishing expeditions"

Analysis should have a concrete outcome (insight) in mind.

Without a target insight, you are "fishing" for interesting things.

Results attempt to support that insight...

Along the way, we might discover different insights.

## Lesson wrap-up

#### **Takeaways**

- Analysis requires understanding of the objective
- Analysis requires proactivity and judgement
- Don't go fishing!

### Up next

What is a result?