



Lesson 3: How Others Use Your Data: The Power of Secondary Data

Target group: 15–17-year-old secondary students in Africa

Key Learning Outcomes

By the end of this lesson, you should be able to:

1. Explain what secondary data is
2. Identify common sources of secondary data
3. Describe the steps in processing secondary data.
4. Recognize work/career opportunities linked to secondary data.

1. Introduction

Back to our example in Lesson 1, your class is selected to represent the youth in the region at a national event. The school engages a tailor to make uniforms for the class. Upon learning of your recent class assignment, the tailor decides not to waste time taking measurements for every student. Instead, for each student, the tailor uses the height, weight, and sex from your table of data, leaving out skin color. In other words, he uses your data to come up with uniforms that fit the entire class.

To your surprise, the tailor includes in the batch of uniforms delivered to your school a special gift box with a beautiful hand-watch – as an appreciation for your primary data.

Here, your primary data, which you collected in response to a request from the class teacher, gets used by the tailor for a completely different purpose. Your data now becomes secondary data to the tailor.

2. Definition of Secondary Data

By definition, secondary data is the data that has already been collected through primary sources and made available for others to use for their own purposes.

3. Process of Using Secondary Data

The process involves several steps:

Step 1: Clarify Purpose

First, the purpose for which you want secondary data must be clear. In our example, the tailor wanted to make uniforms for your class.

Step 2: Sources

Secondary data already exists and is available from different sources such as government census records, school records, academic journals, previous research studies, organizational records, or public databases. Some of these sources are online, while others are not.

In our example, your data was at your school and not online. The tailor had to physically

come to the school to access it. Some online data can be accessed free of charge, while other sources might require payment.

Step 3: Extract Data

Once you access the source, what you want to do will determine the data you extract. The tailor wanted to make uniforms for your class and therefore only picked height, weight, and sex. He left out skin color since all the uniforms were to be of the same color.

Step 4: Data Cleaning

After extracting the data, the next step is cleaning. Cleaning ensures you have the correct values.

- Check that the measurements are correct, or convert them into measurements you are familiar with.
- Acknowledge the source — in the example, the tailor showed appreciation with a gift. In research or studies, this is usually done by citing the original researcher/data owner.
- Enter the extracted data neatly into a book, file, computer, or online database for use.

4. What Is in It for You?

While accessing and using secondary data may not seem very important to a student like you, it can actually open doors to opportunities. Researchers, businesses, organizations and government bodies often hire young people to help with extracting data, cleaning data, entering it into systems, or uploading it online, as explained in bullet (a) below.

a) Work Opportunities for Students

1. Data Entry Clerk

- Typing and entering data into computers.
- Example: entering survey results or school records into Excel.

2. Library or Records Assistant

- Helping organize and maintain archives, reports, and files.
- Example: digitizing school exam records.

3. Research Assistant (Junior)

- Helping senior researchers collect, organize, or clean secondary data.
- Example: supporting a university team by gathering existing reports.

4. Data Cleaning Clerk

- Cross-checking completeness of secondary data.
- Finding and fixing errors in data.

Even before you start looking for these work opportunities, you can:

- Practice on Excel or Google Sheets - with any records at your disposal.
- Explore free online data sets (UNICEF, WHO, local census) and try to understand them.

b) Career Opportunities in Secondary Data

The work opportunities described in (a) above can be a way to earn income and gain valuable skills, while at the same time positioning you for a career in secondary data. Examples include:

1. Data Analyst

- Uses secondary data (like census, market studies,) to make charts and reports.
- Works in banks, schools, NGOs, and businesses.

2. Market Research Analyst

- Uses existing data to study consumer habits and advise businesses.
- Example: looking at sales reports to guide supermarkets or shops.

3. Policy Analyst

- Uses government data to guide public policies in education, health, or environment.
- Example: using district health data to recommend malaria control measures.

4. Archivist/Data Librarian

- Organizes, preserves, and makes secondary data accessible.
- Works in universities, museums, or government offices.

c) Emerging Careers in Secondary Data

1. Data Cleaning Specialist

- Focuses on improving the quality of secondary data.
- Example: fixing errors in health or school data before analysis.

2. Open Data Specialist

- Works with public datasets made available online for free use.
- Example: training schools or NGOs how to use global climate or agricultural data.

5. Conclusion

Secondary data is information collected earlier by someone else for a different purpose, but later used by another person for their own needs. Understanding how secondary data is accessed, extracted, cleaned, and applied will prepare you to see opportunities around you where data is being used and how you might benefit from it.