

Data Analytics Career Track

Southern Water Corp Case Study - Overview


Souther Water Corp. is an Israeli water desalination company that sells fresh water for three customer segments: Residential, Public, and Private. Since the demand for agricultural and residential use is rising, Southern Water Corp. needed to maximize the availability of its three desalination plants. This has resulted in increased revenue for the calendar year. While the increase in revenue is fantastic, Southern Water Corp does not want an unsustainable rise in costs.

Costs between the various plants vary due to the type of desalinated water they produce. **Residential** use requires **only soft water**, which contains no minerals. **Public** and **Private** consumers need a **mix of soft water and hard water**, which contains minerals like calcium. As such, the Operational Expenses between these three plants will vary according to the production potential of desalinated water and chemical costs associated with water type. With this context in mind, management wants to understand the other side of the cost equation. **With increased revenues, has Southern Water Corp seen production costs increase significantly?**

This is where you come in! With the knowledge and foundation you've established across the Excel and Finance Units – you can dive deep into the Financial Data and provide management with a story that captures how the company is performing from an EBIT, Revenues, and Operational Expenses Perspective.

Considering that the desalination plants have been running continuously to meet demand, management has expressed two areas of focus that they would like **you**, the financial data analyst, to review:

- 1) **Macro-Level Analysis** - Analyzing the financial data that has been provided in the Cost Centre Actuals Tabs covering January 2013 to December 2014; Identify what the underlying story is for the Revenues, Expenses, and EBIT at a macro level (i.e. Kootha, Surjek and Jutik being aggregated together).
- 2) **Micro-Level Analysis** – When examining Kootha, Surjek and Jutik – what trends can be picked up revenue, operational expenses, and EBIT? (i.e. Are some Desalination Units far more expensive than others?)



Like any company, Southern Water Corp lives and dies by its cash. If costs are too high and revenue too low then the business is not sustainable. To this end, it is important to understand the revenue-to-expense ratio for all three of the desalination units (Kootha, Surjek, and Jutik). A low revenue-to-expenses ratio indicates that the unit is more expensive to operate, or in other words, there is a lower EBIT because of higher expenses.

Ultimately, our challenge as data analysts is to tell a **meaningful story that drives meaningful insights**. For Southern Water Corp. you'll be measuring your analytical success by ensuring you can tell Southern Water Corp. a meaningful story that unpacks the EBIT, Revenues, and Operational Expenses at a macro and micro level.

This assignment is broken up into three (3) overall components. You are going to analyze the subsequent revenues, operational expenses, EBIT, and tell the overall story you've uncovered.

In Part I of the assignment (Unit 5.4) you're going to tackle **Revenue**.

In Part II of the assignment (Unit 5.6) you're going to tackle the **Operational Expenses**.

In Part III of the assignment (Unit 5.8) you're going to tackle **EBIT**.

Finally, in Part IV of the assignment (Unit 5.8) you're going to conclude your overall analysis by creating a PowerPoint presentation.

Time to get started!