EMPOWERING WOMEN
FOR DIGITAL & REMOTE HR CAREERS

MODULE 3 · HR Data, AI Literacy, and Digital Systems · LESSON 3.3

Working with HR Data

Learn to organise, clean, and summarise HR data, use core indicators, and build a simple dashboard someone else can understand.



1.75 training hours · Phase 1 · RemoteHeR

WHAT THIS LESSON COVERS

From raw data to a readable dashboard

- **Start with the spreadsheet:** Understand cells, ranges, tables, and filters.
- **Clean the data**: Find duplicates, blanks, inconsistent categories, and data problems.
- **Summarise HR data**: Use simple functions and pivot tables to answer questions.
- **Use HR indicators**: Work with time-to-hire, funnel conversion, turnover, absence, and engagement.
- **Build the dashboard**: Choose useful charts and communicate what the data does and does not show.



Good HR analysis starts with a question, not a formula.

Before opening a spreadsheet, decide what you need to understand. A clear question helps you choose the right data, calculation, and comparison.

Before calculating, understand what one row actually represents.

Check the meaning of each row, field, or column available, the time period covered and the categories used. This tells you what the dataset can support.



Cells, Ranges, and Tables

Spreadsheet building blocks help you work with HR data

Cell

A cell is one location in the spreadsheet. It contains one value, such as a department, date, employee ID or number.

Range

A range is a selected group of cells. You use ranges when calculating, sorting, filtering, or creating summaries.

Table

A table organises related data into rows and columns and makes it easier to work consistently with the dataset.



A filter changes what you see without deleting the underlying data.

Use filters to focus on a department, period, recruitment stage, or other category. Always check which filters are active before interpreting the visible rows.

A calculation can be correct and still give the wrong answer.

If the underlying data contains duplicates, blanks, inconsistent categories, or incorrect dates, the formula may calculate exactly what you asked for, but not what you intended.



One person or event should not accidentally count twice

Spot repeated records

Look for repeated IDs, names, or combinations of fields that should identify one record.

Check before deleting

Two similar rows may represent two genuine events, so similarity alone is not proof of duplication.

Keep a decision trail

If you remove or merge a duplicate, record what you changed and why.



A blank is information about the dataset, not automatically a zero.

A blank start date may mean the information is missing, while a zero absence value may mean there was no absence. These are not the same thing.

Consistency in Categories

Spreadsheets require one meaning for each category

“Customer Support”

The full department name is used consistently.

“Customer support”

The wording differs even though the intended category may be the same.

“Cust. Support”

An abbreviation may create a third category when data is grouped.



Dates must be consistent before you compare time.

Check whether dates are stored and displayed consistently. Incorrect formats or missing dates can affect time-to-hire, absence periods, trends, and other time-based calculations.

Summarise Data

Simple functions answer different questions.

SUM

Adds numerical values, such as total absence days or total training hours.

COUNTIF

Counts records that meet one condition, such as applications in the interview stage.

AVERAGE

Calculates the mean of numerical values, such as average time-to-hire.



Never trust a formula simply because the spreadsheet accepted it.

Check the selected range, the condition, the units, and the result. A quick manual check using a small subset can reveal many errors.

Pivot tables turn detailed rows into useful summaries.

Use them to group HR records by fields such as department, recruitment stage, or month, then count, sum, or average a relevant value.



Choose the right summary

Summaries depend on the questions

COUNTS

- How many applications reached interview?
- How many employees are in each department?
- How many absence records were recorded?
- Useful for counts of records meeting defined conditions.

SUM / AVERAGE

- How many total absence days were recorded?
- What was the average time-to-hire?
- What was the average engagement score?
- Useful for numerical values, when the measure supports the calculation.

Which HR indicators turn detailed records into signals you can monitor?

Core HR Indicators

Time-to-hire

How long it takes to move through the relevant hiring process.

Funnel conversion

How many candidates move from one recruitment stage to the next.

Turnover

How much employee movement occurs during a defined period.

Absence

How much scheduled work time is missed because of absence.

Engagement

What employee responses indicate about their reported connection or involvement at work.



Time-to-hire turns recruitment dates into a measure of process duration.

Start by identifying the relevant start and end dates, then calculate the elapsed time for each completed hire. Summarise the results only after checking the dates and population.

Where do candidate numbers change between stages?

Funnel Conversion

1. **Application**
   Start with the number of applications entering the defined recruitment population.

2. **Screening**
   Count how many applications progress to screening.

3. **Interview**
   Count how many candidates reach the interview stage.

4. **Hire**
   Count how many candidates complete the process as hires.

Turnover and Absence

Both indicators describe employee patterns, but they measure different things.

Turnover

- concerns employee movement in or out of the organisation
- usually reported for a defined period
- requires a clear definition of which employee movements count
- does not by itself explain why employees leave

Absence

- concerns missed scheduled work because of absence
- can be reported as days, hours, or a rate
- requires a defined period and population
- does not by itself explain the cause of absence

An engagement score is evidence about responses, not a complete explanation of employee experience.

Check who responded, how the score was calculated, the response rate, and the period covered before comparing groups or making claims.



A dashboard helps someone see the most useful information quickly.

A simple HR dashboard brings together a small number of relevant indicators, clear labels, and appropriate visualisations for a defined audience and period.

Choice according to Audience

The same HR data can require different presentations for different readers.

HR colleague

May need more detail about definitions, categories, and underlying records.

Manager

May need a concise view of trends, differences and areas requiring attention.

Senior decision-maker

May need a small number of clearly defined indicators and key changes over time.

Choose the right chart

Chart and Reader Relationship

Bar Chart

Useful for comparing categories such as departments or recruitment stages.

Line Chart

Useful for showing change over time, such as monthly absence.

Simple Table

Useful when exact values matter more than visual comparison.

How charts can mislead

Charts change the impression without changing the underlying data

Truncated Axis

Starting a vertical axis above zero can make small differences look much larger.

Unequal Categories

Comparing groups with very different sizes can make raw counts misleading.

Too much Decoration

3D effects, excessive labels or visual clutter can hide the important comparison.



Every indicator needs enough context to be understood correctly.

State what is being measured, for which population and period, and what the indicator does not tell the reader.

Snapshot or Trend?

One number and a pattern over time answer different questions

Snapshot

- shows the situation at a particular point or for a defined period
- useful for understanding the current position
- does not show whether the situation is improving or worsening

Trend

- shows how a measure changes across multiple periods
- useful for identifying patterns or changes
- still does not prove why the change happened

Readability of your Dashboard

1. **Define the scope**
   State the population and period so the reader knows what the figures represent.

2. **Select the indicators**
   Include only measures that help answer the intended question

3. **Choose the visualisation**
   Use a chart or table that makes the relevant comparison easy to see.

4. **Add the context**
   Label the measure clearly and note an important limitation where needed.



A good dashboard is selective: it helps the reader understand something specific.

Before you finish, ask what question the dashboard answers and whether another person can identify the population, period, indicators, and limitations without asking you.

NOW IT IS YOUR TURN

Guided Spreadsheet Exercises

Work through a supplied HR dataset from raw records to a simple dashboard.

First inspect the spreadsheet structure and use cells, ranges, tables and filters. Then clean the data, calculate summaries and core HR indicators, choose suitable charts and build a dashboard.

It feeds into

The dashboard section of your final Module 3 artefact.

Read by your tutor

No mark, no score and no ranking. Your tutor reads your work and may give you feedback.

RECAP

Before you move on

- A spreadsheet is easier to analyse when you understand its cells, ranges, tables, and filters.
- Clean data before calculating so duplicates, blanks, categories and dates do not distort your results.
- SUM, COUNTIF, AVERAGE, and pivot tables help you summarise HR data from different angles.
- HR indicators provide useful signals, but their meaning depends on definitions, context, and data quality.
- A good dashboard helps someone else understand the evidence without overstating what the data can show.

Complete the Guided Spreadsheet Exercises, then take the knowledge check before moving to Lesson 3.4.

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Lesson 3.3 complete

You receive a supplied HR spreadsheet and work through it independently.

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