

# Power BI Case Study: Financial Performance Analysis

## Context

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You are part of the finance, risk and strategy team at **Acme Corp**, a mid-sized company operating in multiple regions.

The company wants to understand its financial performance across **products, regions, and sales channels**.

You have access to the **financial sample dataset** in Power BI.

Your task is to create actionable insights that will help management make strategic decisions.

## Objectives

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- Design a **KPI tree** for financial analysis
- Build a **Power BI dashboard** that visualizes performance and risk
- Use your dashboard to answer **critical business questions**
- Challenge yourself with **advanced questions** for deeper insights

## Dataset

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### Financials Table

- **Date** – Transaction date
- **Region** – Region of operation
- **Product** – Product name
- **Sales\_Channel** – Online, Retail, Wholesale
- **Revenue** – Total revenue
- **Cost** – Total cost
- **COGS** – Cost of Goods Sold
- **Discounts** – Discounts applied
- **Returns** – Returns value
- **Units\_Sold** – Quantity sold

- Profit – Revenue - Cost - Discounts - Returns

**\*\*Risk Data \*\***

Column	Description
RecordID	Unique incident or control record
Department	Department under review
Country	Country where incident/control applies
RiskCategory	Operational, Financial, Compliance, IT Security, Strategic
ControlID	Identifier for control
ControlName	Short description of control
ControlOwner	Responsible person
TestDate	Date control was tested (2013–2014)
TestResult	Pass / Fail
Severity	Low / Medium / High (if failed)
IssueLogged	Yes / No
IssueStatus	Open / In Progress / Closed
DaysOpen	Days since issue opened
AuditCycle	Quarter derived from TestDate
RiskScore	Risk impact score (1–100)
RemediationDueDate	Target resolution date
ActionOwner	Person responsible for remediation
ActionProgress	% completion
Comments	Notes or observations

## Task 1: KPI Tree Design

Design a KPI tree to organize financial metrics. Start from **high-level KPIs** and drill down to **detailed supporting metrics**.

**Exercise:**

- Sketch your KPI tree
- Consider how each metric **links to actionable decisions**

## Task 2: DQ Assessment & recommendations

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Review the Quality of the data based on completeness, accuracy and validity to support critical financial metrics. Note the issues and potential recommendations to address the issue noted.

**Exercise:**

- Note Down the issues identified
- What are the potential impacts to the insights to be generated.
- Consider how each issue can be addressed as per the governance operating model discussions.

## Task 3: Build a Power BI Dashboard

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1. Load the dataset into Power BI
2. Create **measures** for:
  - Revenue, Profit, Units Sold, Discounts, Returns
  - Total Incidents, % Controls Passed, Avg Resolution Time, RiskScore
3. Visuals to include:
  - Cards for totals (Revenue, Profit, Net Loss, Total Incidents)
  - Column/Bar charts for breakdown by Country, Department, Product
  - Line charts for trends over time (Revenue, Incidents, RiskScore)
  - Heatmaps (Country vs. RiskCategory, Severity vs. Department)
  - Matrix/table for detailed view by control, country, and audit cycle
4. Filters/Slicers:
  - Date range, Country, Product, Department, Risk Category
5. Design your dashboard **intuitively**, following your KPI tree

## Task 4: Answer Key Questions

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Use your dashboard to answer the following **business questions**:

### Core Questions

1. Which region contributes the highest revenue and profit?
2. Which product category has the highest margin?
3. What is the trend of revenue and profit over time?
4. Which sales channel is most profitable?
5. How do discounts and returns impact net profit?

## Core Risk & Compliance Questions

1. Which country has the **highest total incident cost**?
2. Which departments have the **most control breaches**?
3. Average resolution time by department and country?
4. Correlation between **risk severity** and **profit dips**?

## Advanced Questions

1. Identify the most profitable products after adjusting for discounts and returns
2. Calculate profit per unit sold for each region and channel. Which combination is most efficient?
3. Determine month-over-month revenue growth for each product category
4. Analyze profitability by product and region simultaneously
5. Identify potential underperforming products and suggest next steps
6. Identify products or regions with **high revenue but high operational risk**
7. Compute **risk-adjusted profit** for each country
8. Visualize a **risk heatmap**: Country × Severity × RiskCategory
9. Analyze **remediation efficiency**: % issues closed on time vs. RiskScore
10. Identify months/quarters where **incidents spike** and financial performance drops

## Deliverables

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- KPI tree diagram (hand-sketched or digital)
- Power BI dashboard file (.pbix)
- Insights report answering all **core** and **advanced questions**

## Instructions for Delegates

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- Spend **20–30 mins** on KPI tree design
  - Spend **60–90 mins** building your dashboard
  - Answer **core questions first**, then tackle advanced questions
  - Be prepared to **present your insights** to the group
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# END

## Example KPI structure

Example structure:

- Revenue
  - By Country
  - By Product
- Profit
  - Adjusted Profit (after risk losses)
- Total Incidents
  - By Risk Category
  - By Country
- Control Performance
  - % Controls Passed
  - % Issues Closed on Time
- Compliance Costs
  - Non-compliance Penalties / Net Loss