

<b>Cegid Academy</b>	<b>Cálculo com DAX</b>	<b>Exercício</b>
----------------------	------------------------	------------------

## Objetivo

Praticar e consolidar conhecimentos de DAX em Power BI Desktop.

## Tema

Recursos Humanos.

## Enunciado

A empresa Data Incubator, Ltd. pretende analisar os dados de seus colaboradores e o desempenho geral dos departamentos.

Crie as necessárias métricas e cálculos para responder às perguntas seguintes.

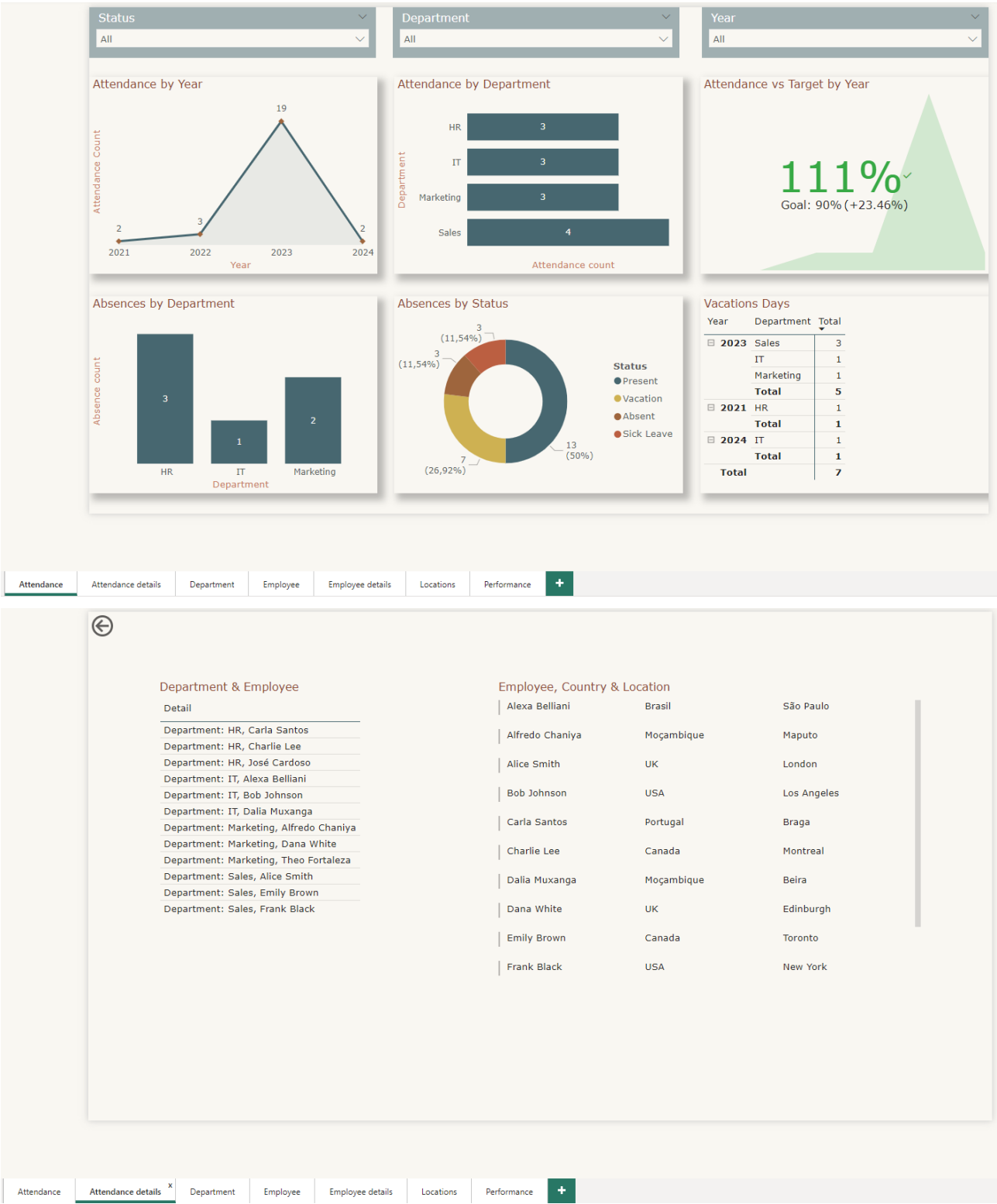
## Perguntas

1. Presença e Ausência dos colaboradores:
  - 1.1. Qual é o total de dias de presença e ausência por departamento?
  - 1.2. Qual é a percentagem de presença total em relação à meta de 90%?
2. Desempenho dos Colaboradores:
  - 2.1. Calcule a média de pontuação de desempenho dos colaboradores por ano e departamento.
  - 2.2. Compare o desempenho do ano atual com o ano anterior.
3. Admissões e Salários:
  - 3.1. Quantas admissões ocorreram por departamento e por ano?
  - 3.2. Qual é o salário médio e o desvio padrão dos salários por departamento?
4. Orçamento e Crescimento:
  - 4.1. Qual foi a variação percentual do orçamento entre os anos?
  - 4.2. Qual é o crescimento ano-a-ano (YoY) na pontuação de desempenho dos colaboradores?

## Ficheiros fornecidos

1. Ficheiro de Excel com:
  - Dados a importar.
  - Tabela de funções a utilizar no exercício.
  - Tabela de fórmulas DAX a criar no exercício.
2. Script com o código DAX necessário para criar a tabela Calendar no modelo de dados.

Relatório



Attendance

Attendance details

Department

Employee

Employee details

Locations

Performance

+

Department & Employee

Detail

Department: HR, Carla Santos

Department: HR, Charlie Lee

Department: HR, José Cardoso

Department: IT, Alexa Belliani

Department: IT, Bob Johnson

Department: IT, Dalia Muxanga

Department: Marketing, Alfredo Chaniya

Department: Marketing, Dana White

Department: Marketing, Theo Fortaleza

Department: Sales, Alice Smith

Department: Sales, Emily Brown

Department: Sales, Frank Black

Employee, Country & Location

Alexa Belliani

Brasil

São Paulo

Alfredo Chaniya

Moçambique

Maputo

Alice Smith

UK

London

Bob Johnson

USA

Los Angeles

Carla Santos

Portugal

Braga

Charlie Lee

Canada

Montreal

Dalia Muxanga

Moçambique

Beira

Dana White

UK

Edinburgh

Emily Brown

Canada

Toronto

Frank Black

USA

New York

Attendance

Attendance details

Department

Employee

Employee details

Locations

Performance

+

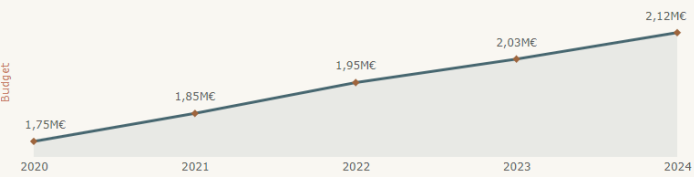
Total Departments

4

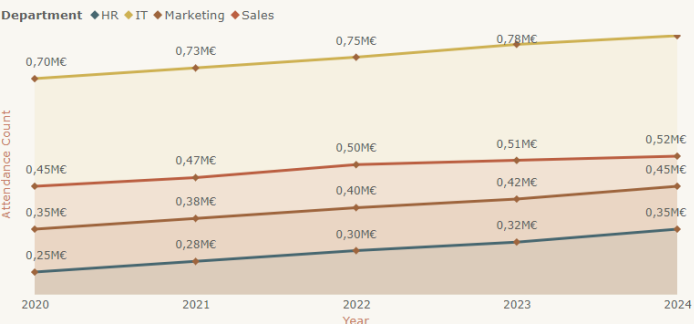
Budget Change by Year & Department

Year	Budget change %
2021	
HR	10,00%
IT	3,57%
Marketing	7,14%
Sales	4,44%
2022	
HR	9,09%
IT	3,45%
Marketing	6,67%
Sales	6,38%
2023	
HR	6,67%
IT	4,00%
Marketing	5,00%
Sales	2,00%
2024	
HR	9,38%
IT	2,56%
Marketing	7,14%
Sales	1,96%

Overall Cumulative Budget Trend

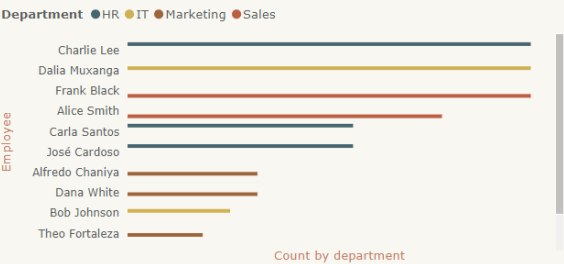


Cumulative Budget by Department

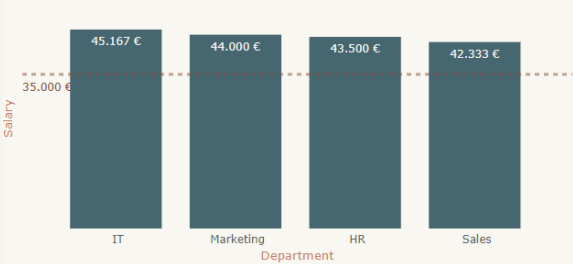


Attendance Attendance details Department x Employee Employee details Locations Performance +

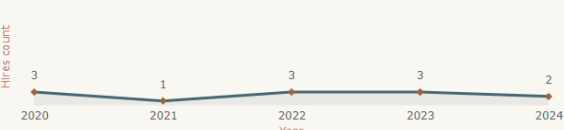
Employees Tenure Months



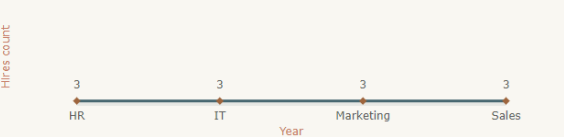
Average Salary by Department



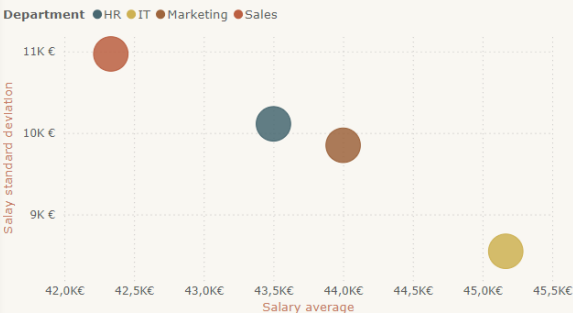
Hires per Year



Hires per Department



Salary Average vs Dispersion by Department



Attendance Attendance details Department Employee x Employee details Locations Performance +

←

Total Departments

12

Employee Details

Employee	Department	City	Country	Hire date	Termination date	Annual salary
Alexa Belliani	IT	São Paulo	Brasil	01-07-2024		41.000 €
Alfredo Chaniya	Marketing	Maputo	Moçambique	01-05-2023		55.000 €
Alice Smith	Sales	London	UK	01-02-2021		36.000 €
Bob Johnson	IT	Los Angeles	USA	01-03-2022	30-06-2023	39.500 €
Carla Santos	HR	Braga	Portugal	01-03-2022		55.000 €
Charlie Lee	HR	Montreal	Canada	01-01-2020		36.000 €
Dalia Muxanga	IT	Beira	Moçambique	01-01-2020		55.000 €
Dana White	Marketing	Edinburgh	UK	01-05-2023		41.000 €
Emily Brown	Sales	Toronto	Canada	01-04-2024		36.000 €
Frank Black	Sales	New York	USA	01-01-2020		55.000 €
José Cardoso	HR	Porto	Portugal	01-03-2022		39.500 €
Theo Fortaleza	Marketing	Rio de Janeiro	Brasil	01-05-2023	01-04-2024	36.000 €

Attendance

Attendance details

Department

Employee

Employee details x

Locations

Performance

+

Country

All

City

All

Employees Count

Location	Employees count
Brasil	2
Rio de Janeiro	1
São Paulo	1
Canada	2
Montreal	1
Toronto	1
Moçambique	2
Beira	1
Maputo	1
Portugal	2
Braga	1
Porto	1
UK	2
Edinburgh	1
London	1
USA	2
Los Angeles	1
New York	1
Total	12

Geographical Distribution of Employees

Attendance

Attendance details

Department

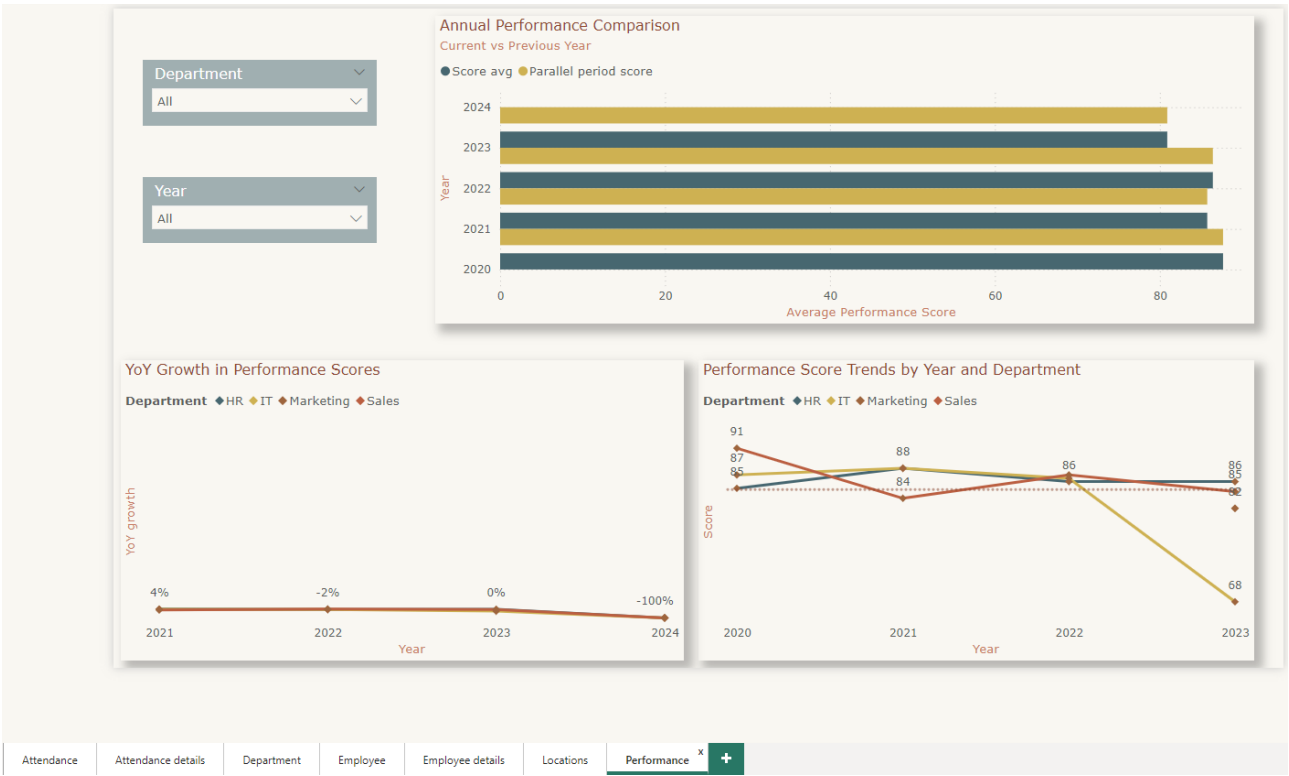
Employee

Employee details

Locations x

Performance

+



Attendance

Attendance details

Department

Employee

Employee details

Locations

Performance x +