Database for Agile HR Analytics

Truong Hoai Nam

Agile HR analytics

- Summary Dashboard
- Diversity
- Employee Details
- Salary Analysis
- Business Unit
- Performance Rating
- Training
- Leave Analysis
- Absenteeism
- Termination Analysis

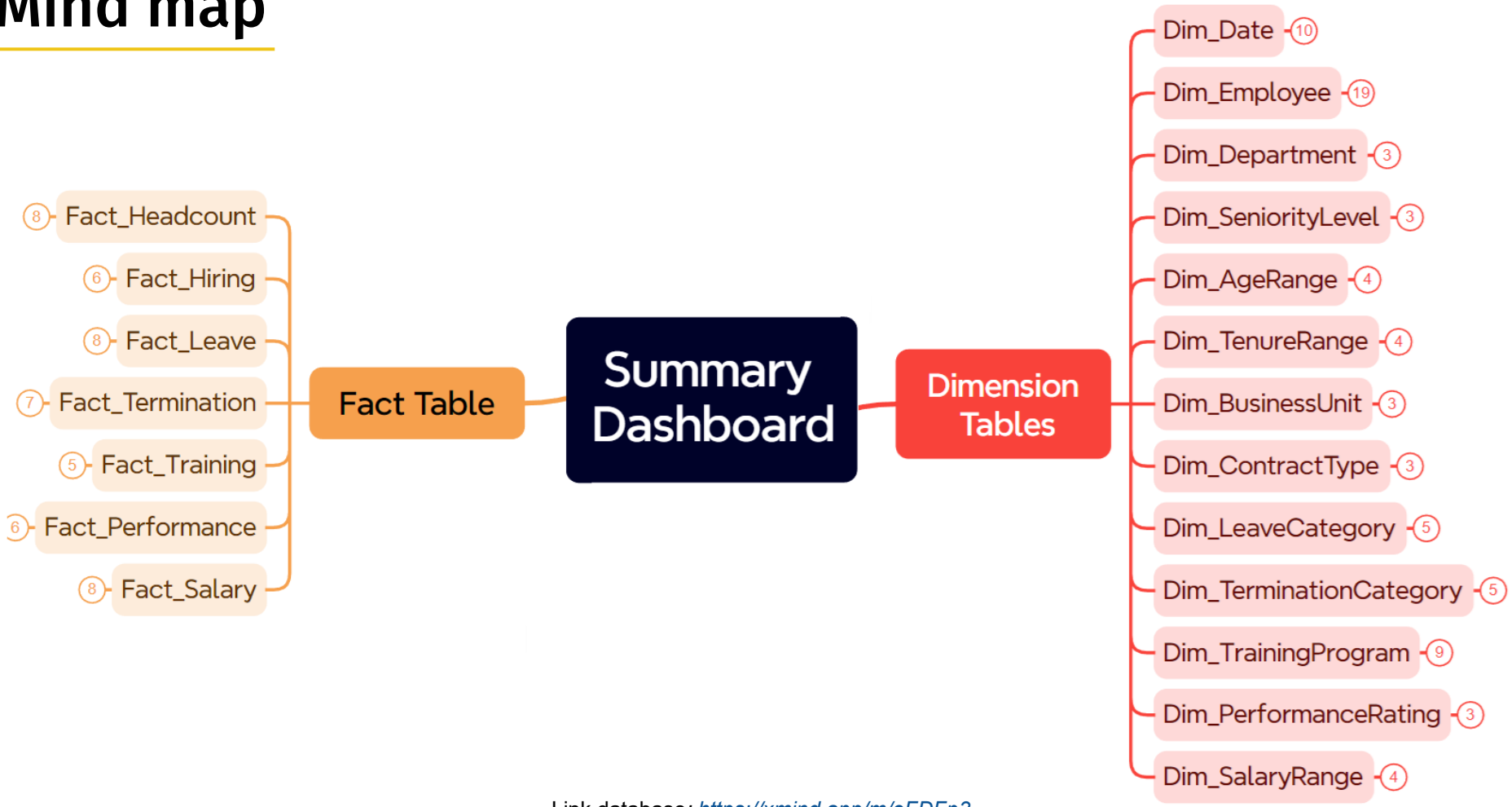
A full end-to-end **analytics and reporting solution** – built on Microsoft Power BI – to help you discover useful HR insights for strategic decision making.

It enables HR professionals to make data-driven decisions to attract, manage, and retain employees, and helps leaders make decisions to create better work environments and maximize employee satisfaction and productivity which has a **major impact** on the bottom-line when used effectively.

This is a Demo (trial) version. To get the full production version please contact us or visit us at:

Agile Analytics

Mind map



Link database*: https://xmind.app/m/eFDFp3*

Summary Dashboard

2018 | 2019 | 2020

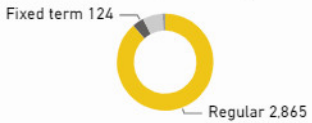
Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

Business Unit: All

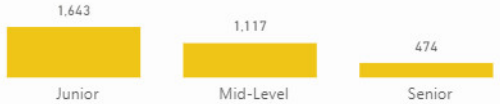
Employees

Headcount: 3,234 ▲ 0.68%

Headcount by Contract Type



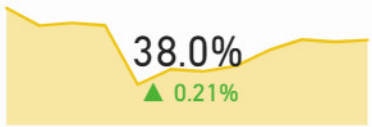
Headcount by Seniority



Average Tenure: 9.6 years

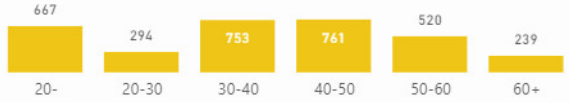
Diversity

Female % of Seniors: 38.0% ▲ 0.21%



Headcount by Gender

Headcount by Age Range

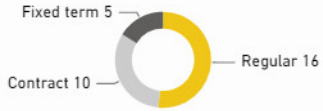


Average Age: 44.1 years

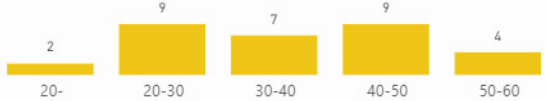
Hiring

Hires: 31 ▼ -20.51%

Hires by Contract Type



Hires by Age Range

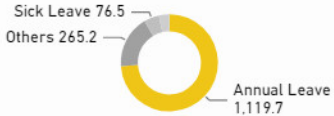


Hires by Gender

Leave Days

Leave Taken: 1,515 days

Leave Taken by Category



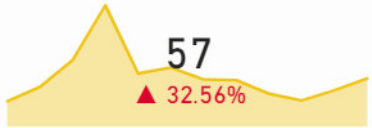
Total remaining annual leave: 63,165 days

Avg. remaining annual leave per person: 19.5 days

Cost of total remaining annual leave: $69.3M

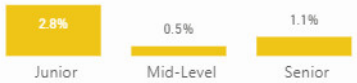
Termination

Terminations: 57 ▲ 32.56%



Terminations by Category

Attrition Rate by Seniority



Attrition Rate by Tenure Range

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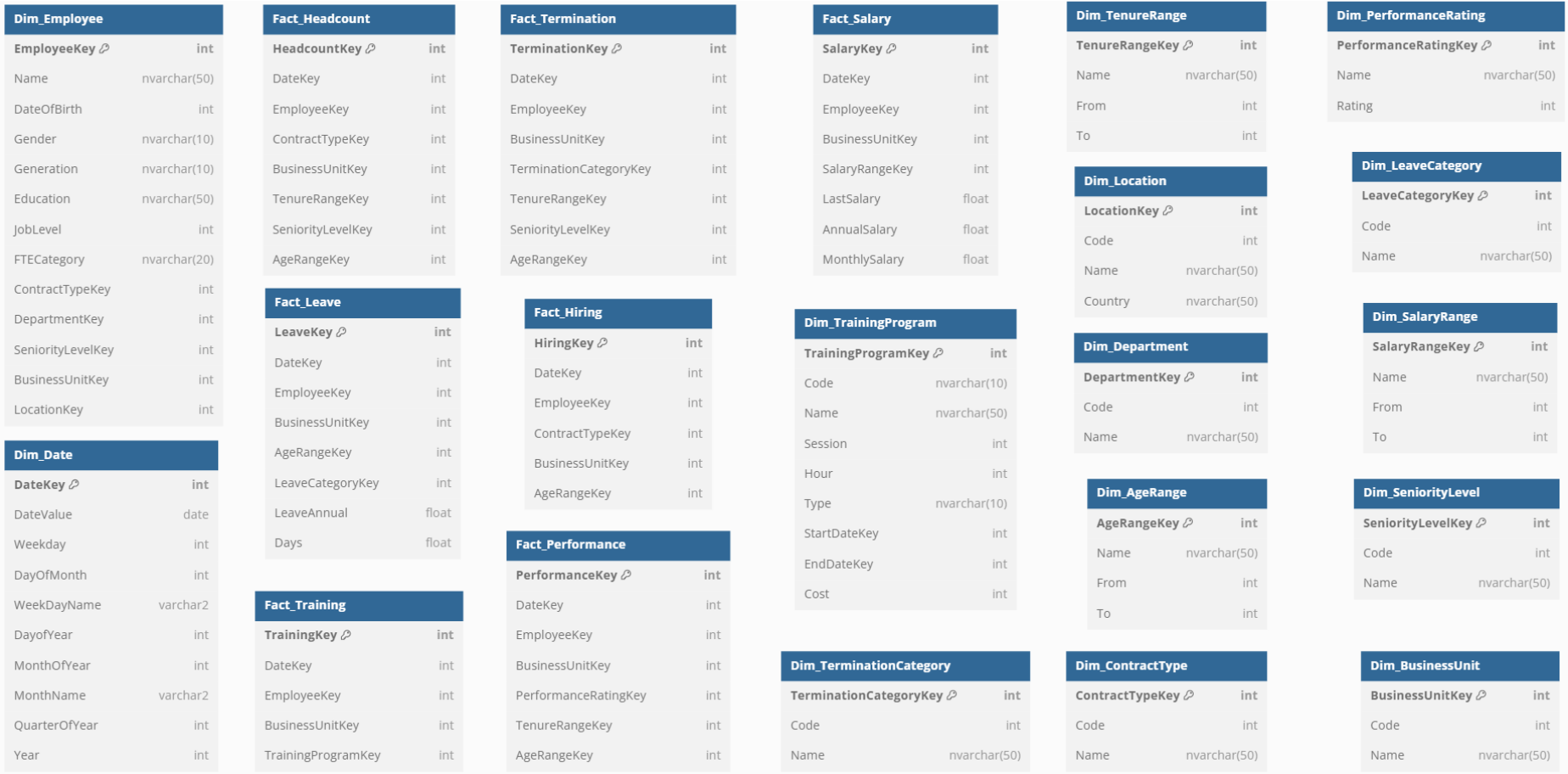
General Database



Link database: https://dbdiagram.io/d/PowerBI-66367af75b24a634d08297b4

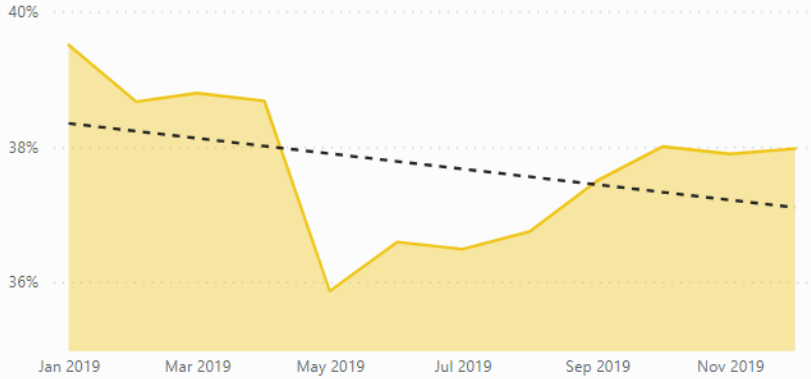
Diversity

2018 | 2019 | 2020

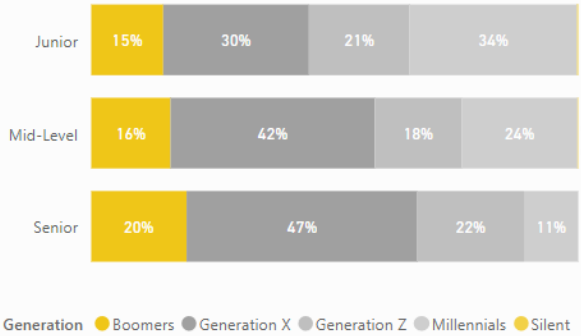
Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

Business Unit: All

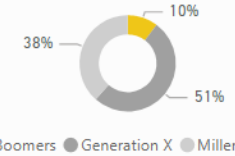
% of Female in Senior Level



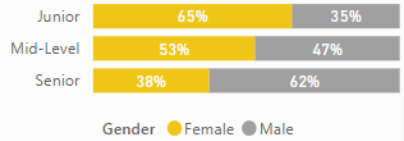
Headcount by Seniority and Generation



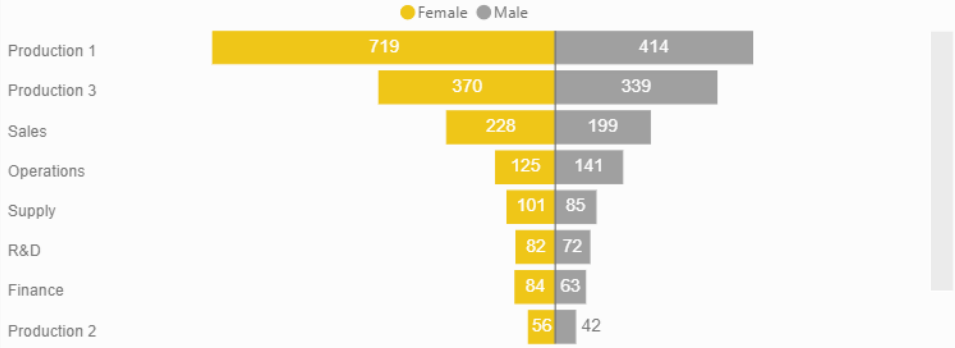
Hires by Generation



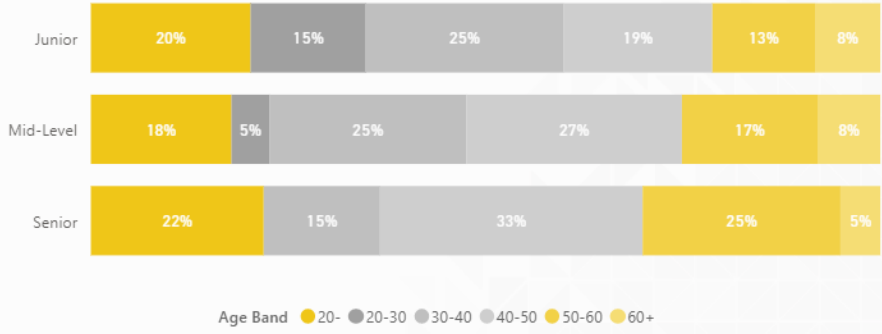
Headcount by Seniority and Gender



Gender Diversity by Business Unit



Headcount by Seniority and Age Banding



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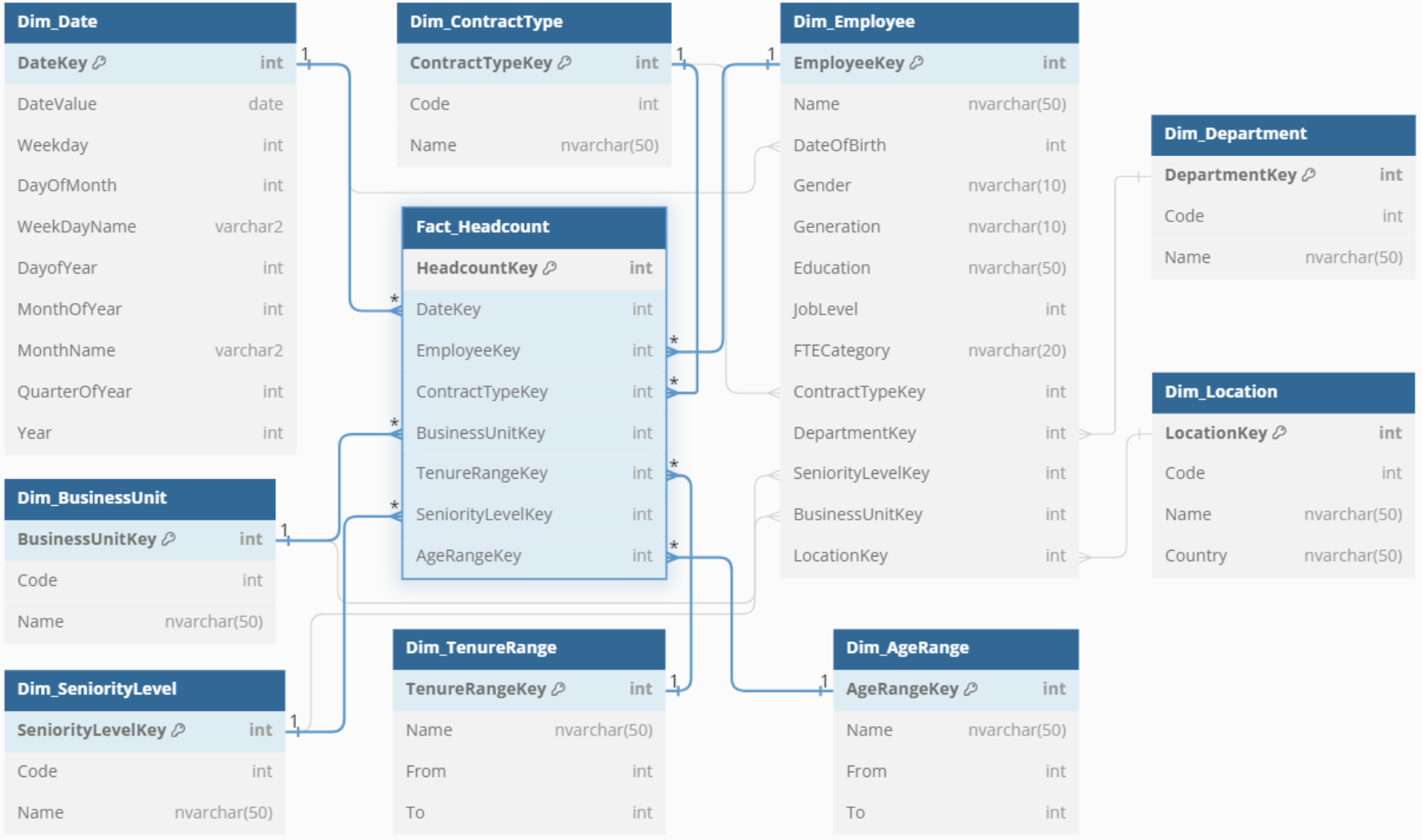
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MonthOfYear int
MonthName varchar2
QuarterOfYear int
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Dim_Employee
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Name nvarchar(50)
DateOfBirth int
Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
ContractTypeKey int
DepartmentKey int
SeniorityLevelKey int
BusinessUnitKey int
LocationKey int
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Code int
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SeniorityLevelKey int
AgeRangeKey int
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BusinessUnitKey int
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Dim_SeniorityLevel
SeniorityLevelKey int
Code int
Name nvarchar(50)
Dim_TenureRange
TenureRangeKey int
Name nvarchar(50)
From int
To int
Dim_AgeRange
AgeRangeKey int
Name nvarchar(50)
From int
To int

Salary Analytics

Date range

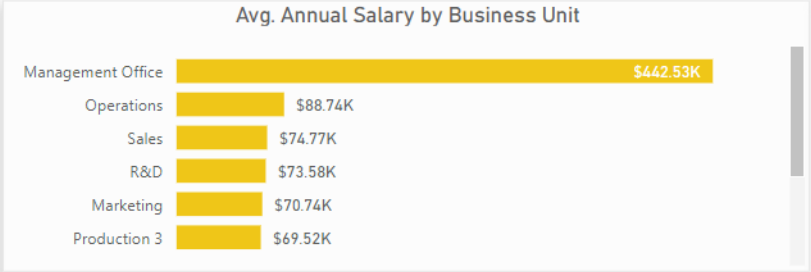
1/1/2019 9/30/2020

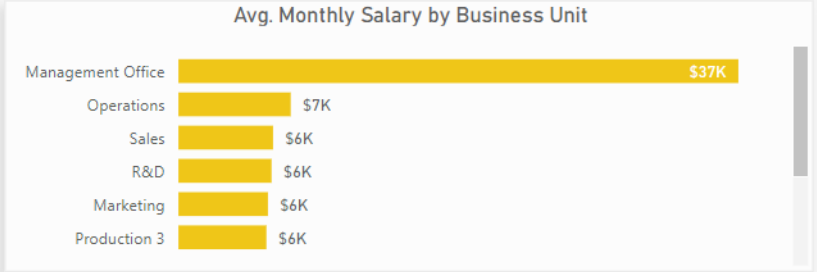
Total Salary Expenses

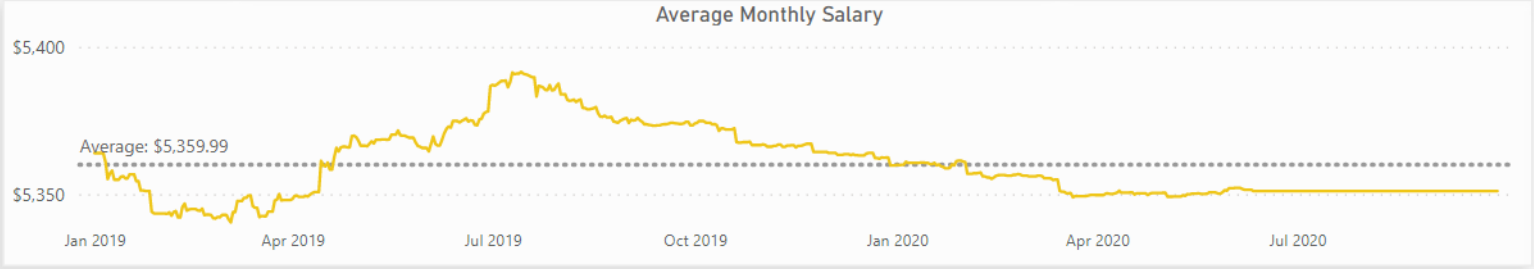
$906M

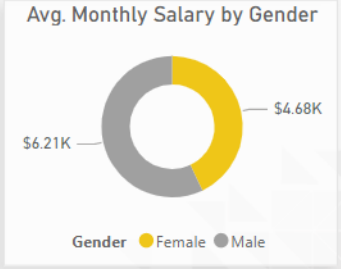
Avg. Monthly Employee Salary

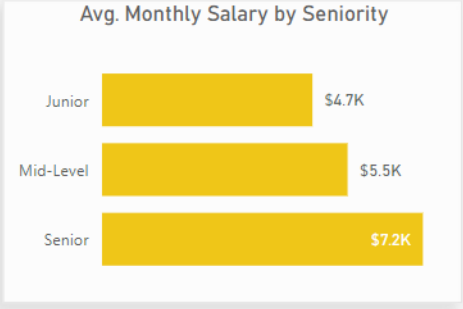
$5.34K

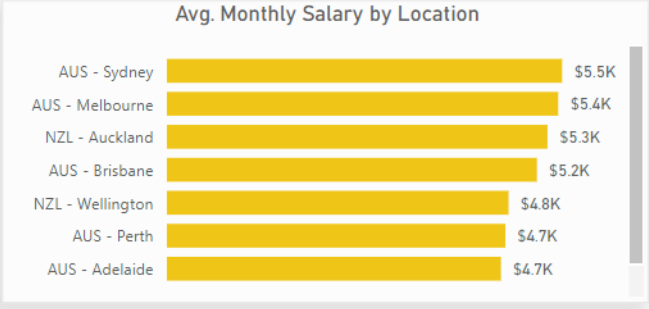


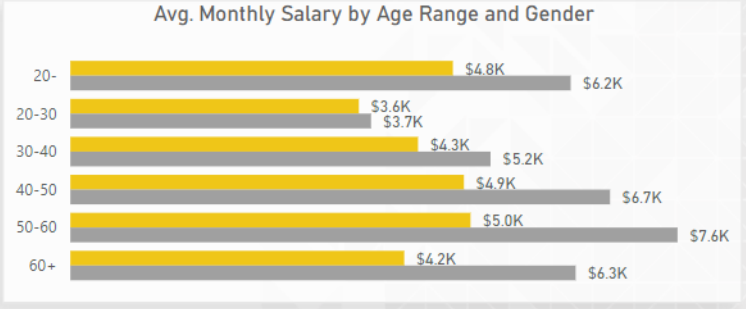












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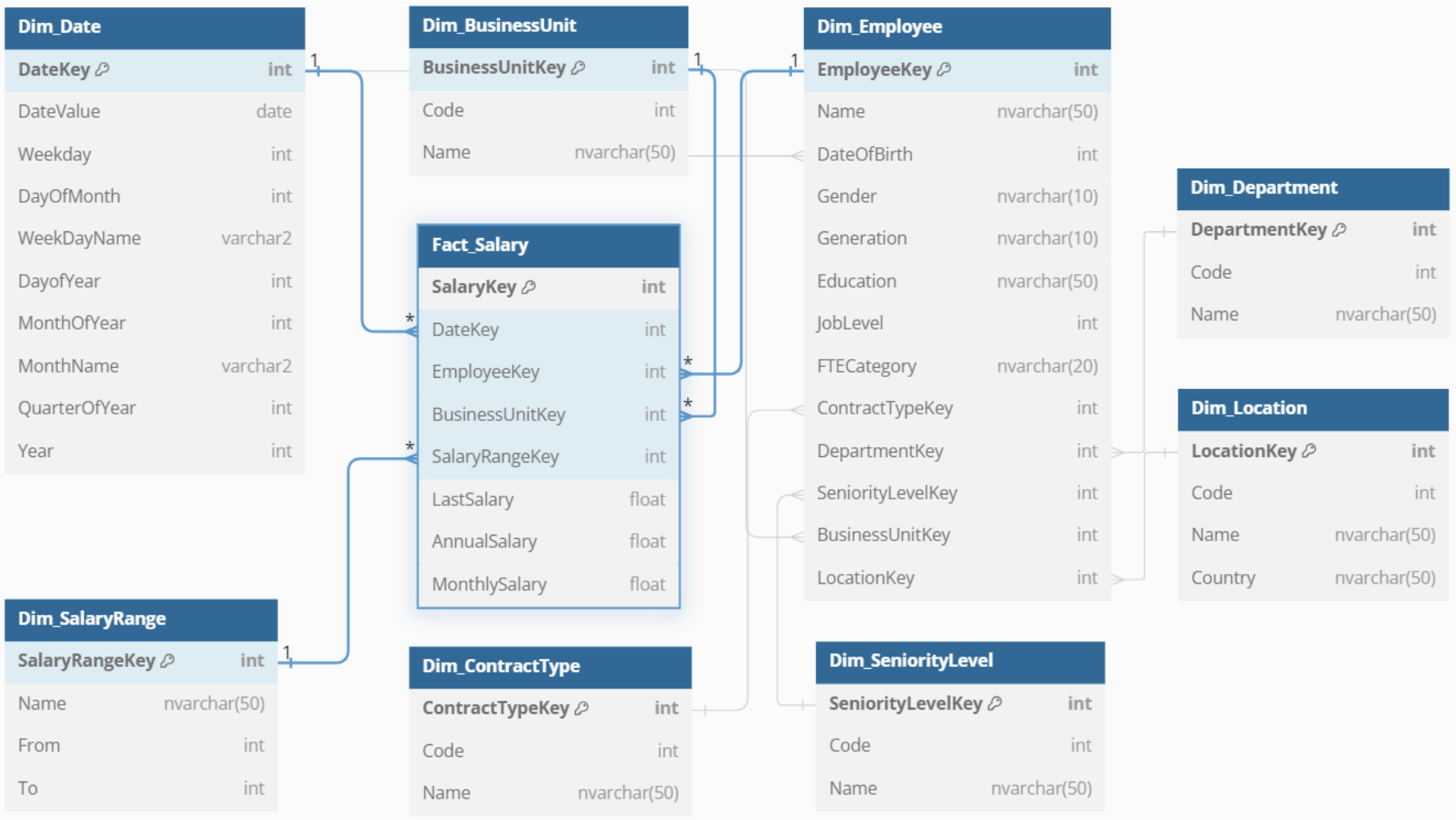
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DayOfMonth int
WeekDayName varchar2
DayofYear int
MonthOfYear int
MonthName varchar2
QuarterOfYear int
Year int
Dim_BusinessUnit
BusinessUnitKey int
Code int
Name nvarchar(50)
Dim_Employee
EmployeeKey int
Name nvarchar(50)
DateOfBirth int
Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
ContractTypeKey int
DepartmentKey int
SeniorityLevelKey int
BusinessUnitKey int
LocationKey int
Dim_Department
DepartmentKey int
Code int
Name nvarchar(50)
Fact_Salary
SalaryKey int
DateKey int
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From int
To int
Dim_ContractType
ContractTypeKey int
Code int
Name nvarchar(50)
Dim_SeniorityLevel
SeniorityLevelKey int
Code int
Name nvarchar(50)
1
*

Business Unit

Disguised Headcount

2018 | 2019 | 2020

Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

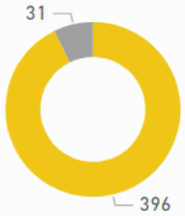
Business Unit: Sales

Headcount	Hires	Terminations
427	19	14

Demographic

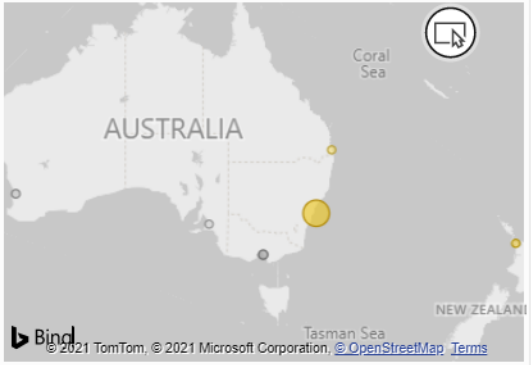
	Female	Male	Average Tenure	Average Age	Female % of Seniors
	53.40%	46.60%	6.8 years	43.3 years	34.6%

Headcount by FTE Category

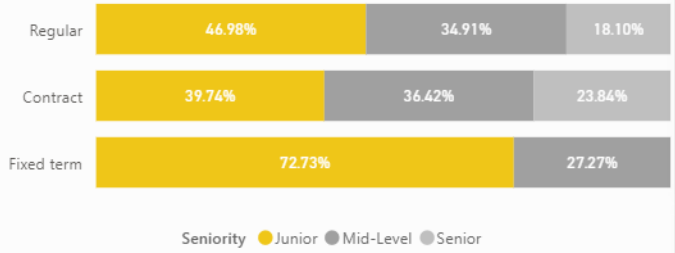


FTE Category: Full time | Part time

Headcount by Location

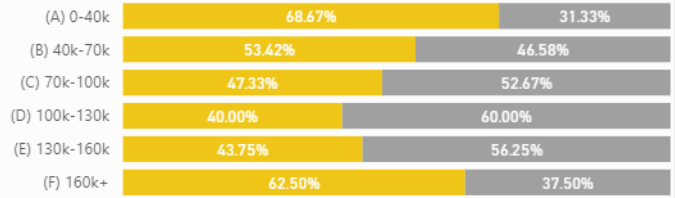


Employee distribution by Contract Type and Seniority

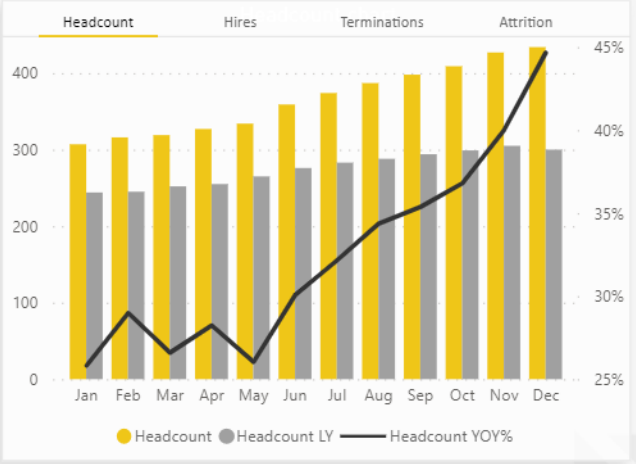


Seniority: Junior | Mid-Level | Senior

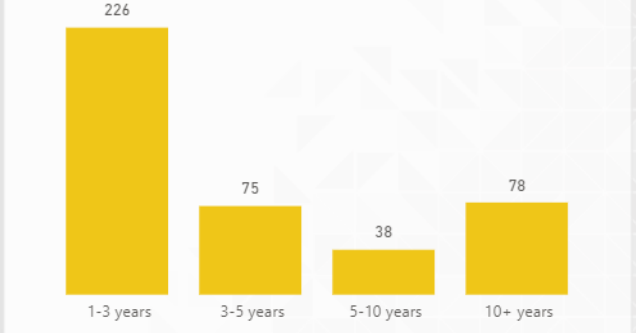
Employee distribution by Salary Range and Gender



Gender: Female | Male



Headcount by Tenure Range



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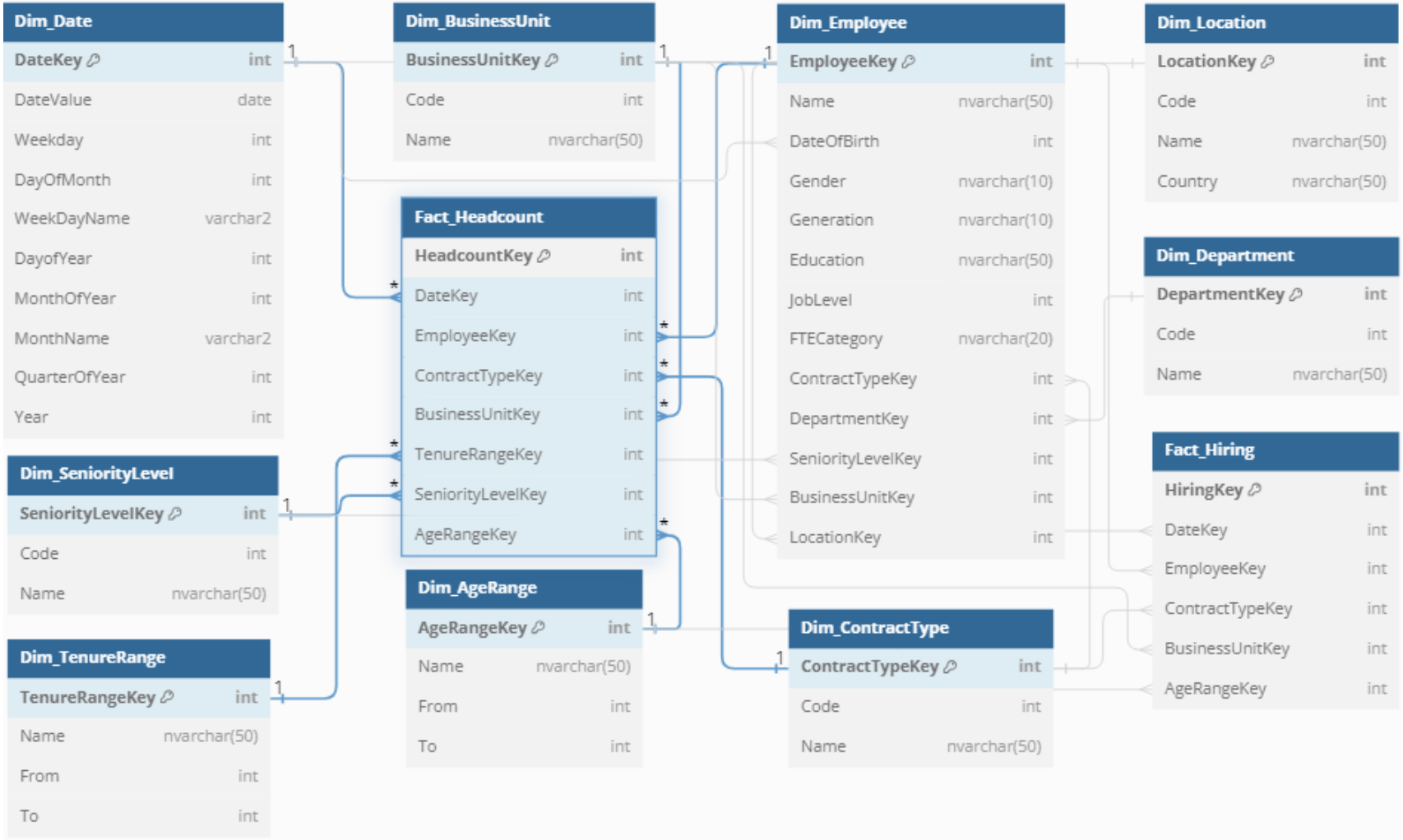
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MonthName varchar2
QuarterOfYear int
Year int
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BusinessUnitKey int
Code int
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Dim_Employee
EmployeeKey int
Name nvarchar(50)
DateOfBirth int
Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
ContractTypeKey int
DepartmentKey int
SeniorityLevelKey int
BusinessUnitKey int
LocationKey int
Dim_Location
LocationKey int
Code int
Name nvarchar(50)
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Fact_Headcount
HeadcountKey int
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BusinessUnitKey int
TenureRangeKey int
SeniorityLevelKey int
AgeRangeKey int
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Dim_SeniorityLevel
SeniorityLevelKey int
Code int
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To int
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Name nvarchar(50)
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Name nvarchar(50)
From int
To int

Performance Rating

2018 | 2019 | 2020

Jan | Feb | Mar | Apr | May | Jun

Jul | Aug | Sep | Oct | Nov | Dec

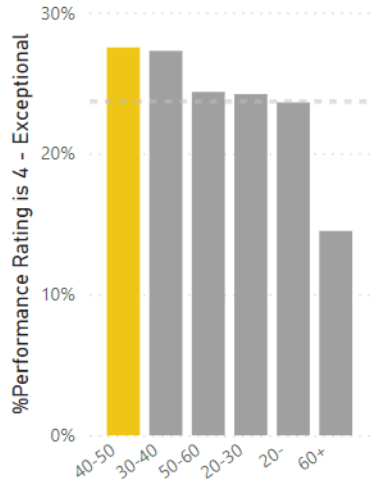
Business Unit: All

Key influencers

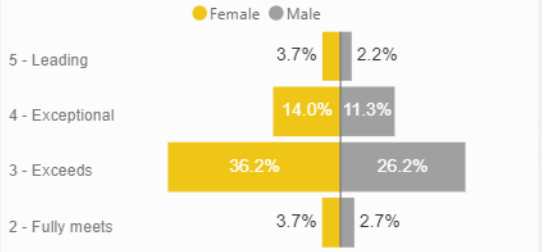
What influences Performance Rating to be 4 - Exceptional ?

When...	....the likelihood of Performance Rating being 4 - Exceptional increases by
Age Banding is 40-50	1.16x

Performance Rating is more likely to be 4 - Exceptional when Age Banding is 40-50 than otherwise (on average).



Only show values that are influencers



Total Employees Reviewed

2,122

With rating 3 or better

93.5%

Distribution by Tenure range | Distribution by Age range

Performance Rating	20-	20-30	30-40	40-50	50-60	60+	Total
5 - Leading	19	4	45	33	20	3	124
4 - Exceptional	99	29	147	140	97	25	537
3 - Exceeds	292	65	284	298	249	136	1,324
2 - Fully meets	50	11	24	28	15	9	137
1 - Needs improvement							
Total	**460**	**109**	**500**	**499**	**381**	**173**	**2,122**

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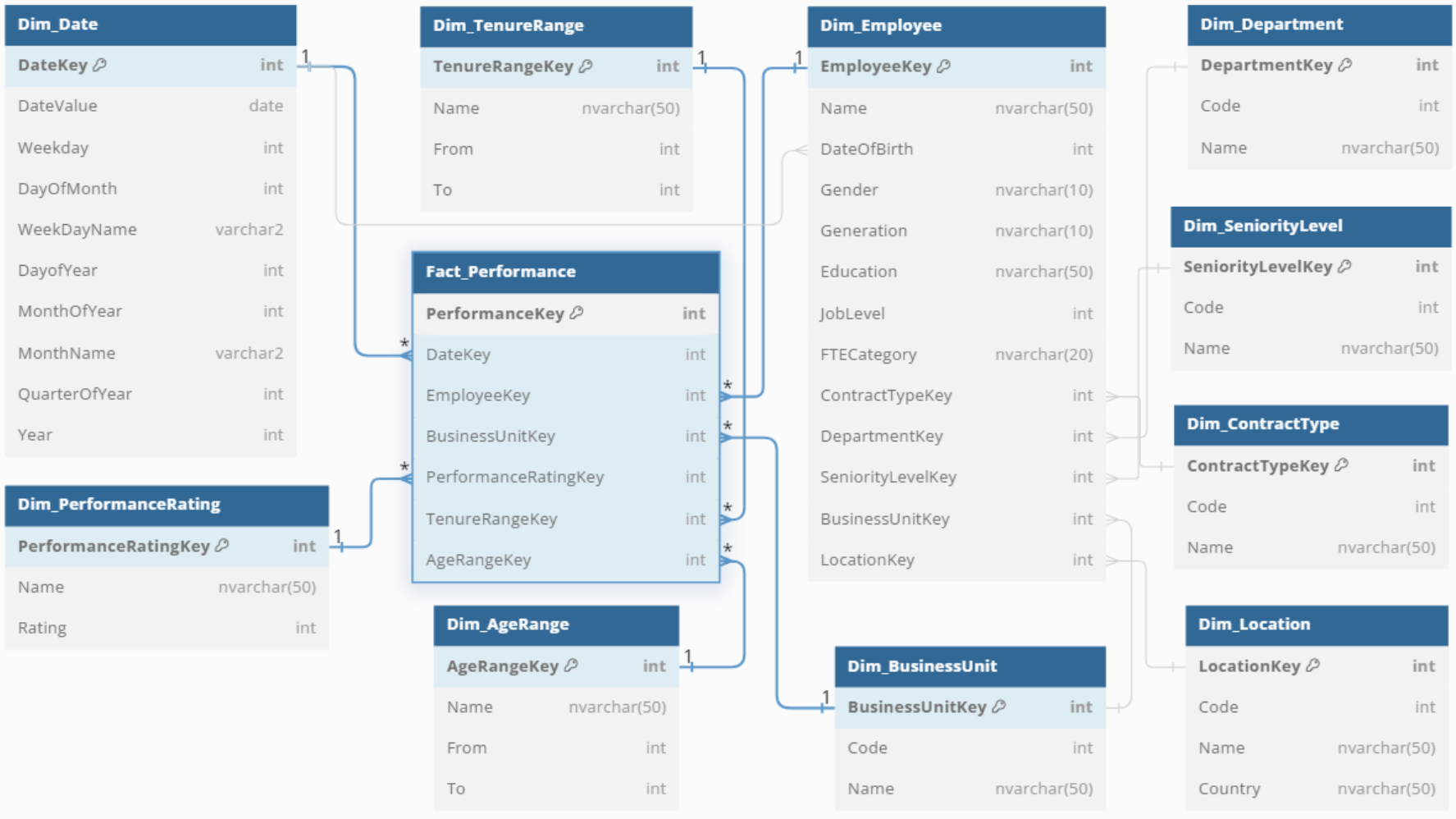
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MonthName varchar2
QuarterOfYear int
Year int
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TenureRangeKey int
Name nvarchar(50)
From int
To int
Dim_Employee
EmployeeKey int
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Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
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SeniorityLevelKey int
BusinessUnitKey int
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TenureRangeKey int
AgeRangeKey int
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To int
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Name nvarchar(50)
Dim_Location
LocationKey int
Code int
Name nvarchar(50)
Country nvarchar(50)
1
*

Training

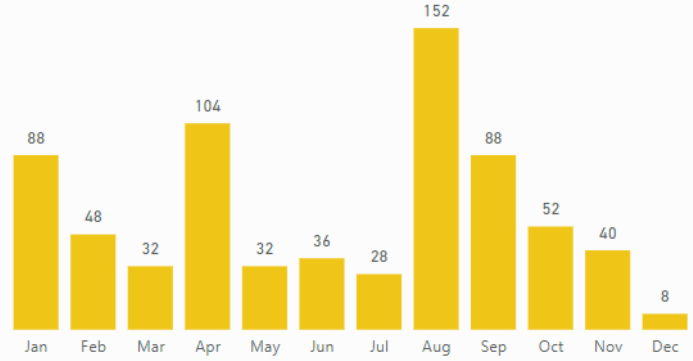
2018 2019 2020 | Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Training Programs	Participants	Man Hours spent in Training	Total Costs	Training Costs per Person
2	8	40	$4K	$543

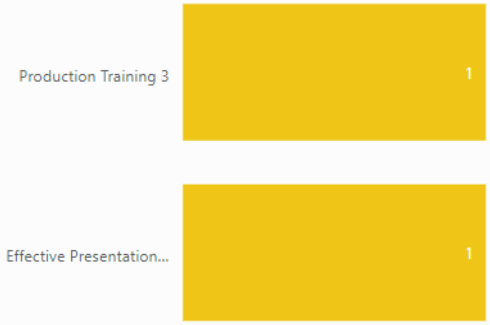
Count of Participants by Training Type

Training Type External Internal

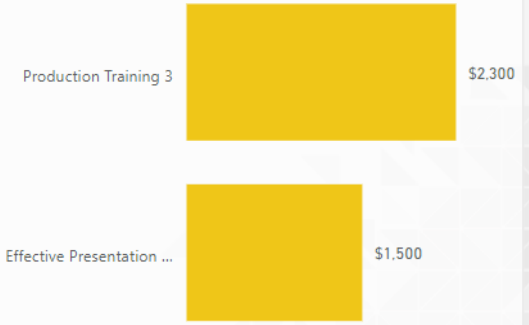
Training Man Hours by Month



Completed Programs



Training Costs



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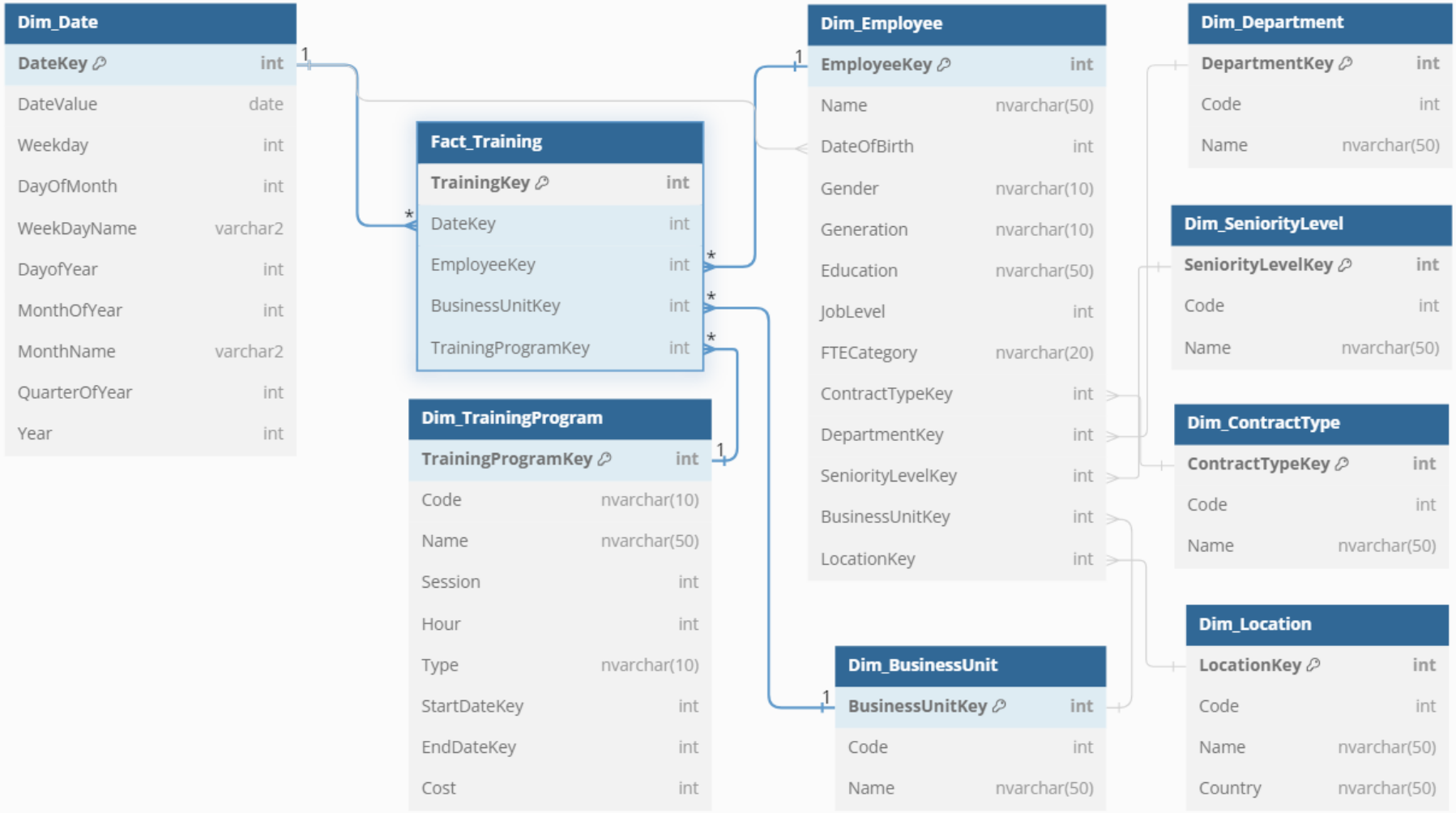
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DepartmentKey int
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LocationKey int
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Country nvarchar(50)
1
*

Leave Analysis

2018 | 2019 | 2020

Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

Average Total Leave Days
3.7
days

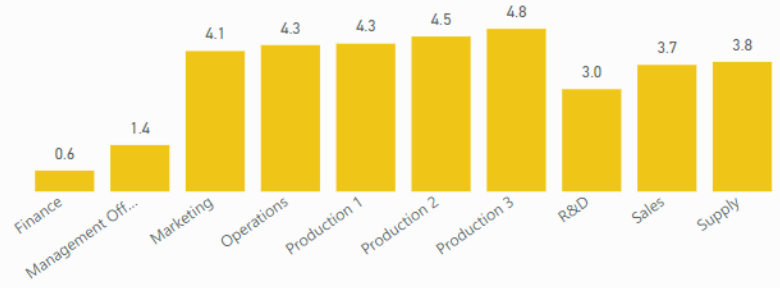
Average Annual Leave Days
3.6
days

Annual Leave balance
45.1K
days

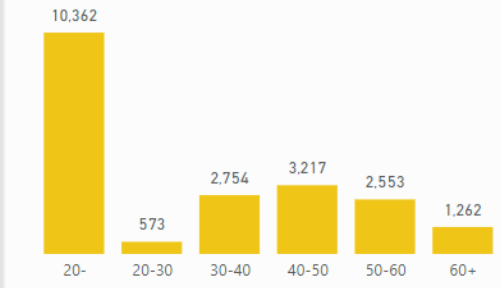
Cost of remaining annual leave
$58.6M

Avg. cost of remaining annual leave
$21,128

Average days on leave by Business Unit

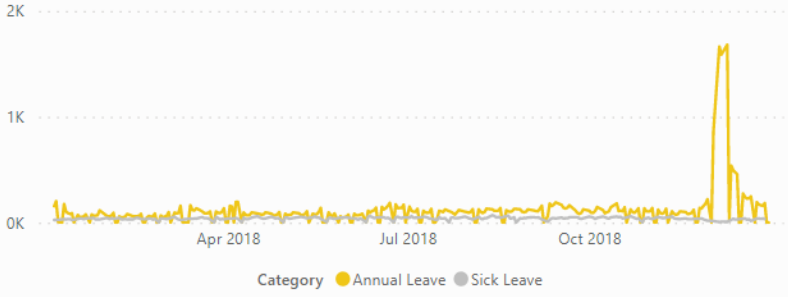


Total days on leave by Age Range

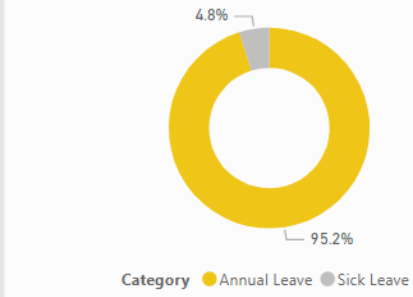


Average cost of remaining annual leave by Business Unit

Leave by Date



Leave by Category



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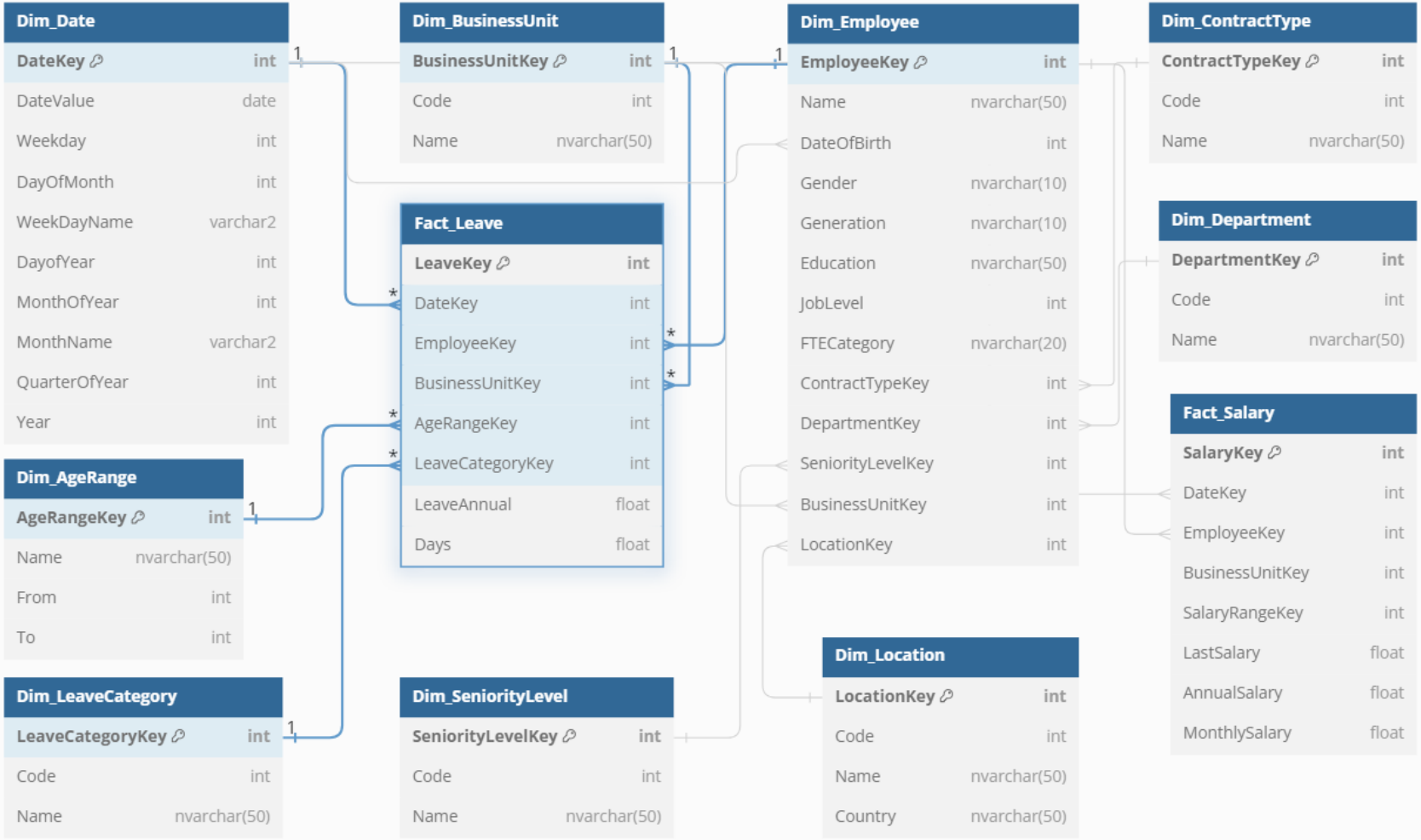
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Name nvarchar(50)
DateOfBirth int
Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
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BusinessUnitKey int
LocationKey int
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EmployeeKey int
BusinessUnitKey int
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AnnualSalary float
MonthlySalary float
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To int
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LeaveCategoryKey int
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Name nvarchar(50)
Dim_SeniorityLevel
SeniorityLevelKey int
Code int
Name nvarchar(50)
Dim_Location
LocationKey int
Code int
Name nvarchar(50)
Country nvarchar(50)

Absenteeism

2018 | 2019 | 2020

Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

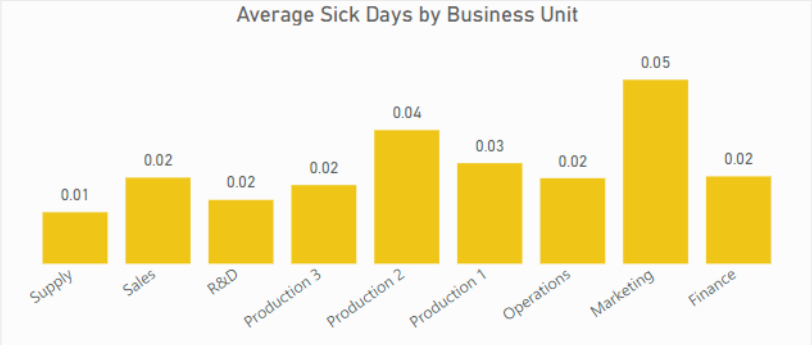
Average Total Leave Days
0.5
days

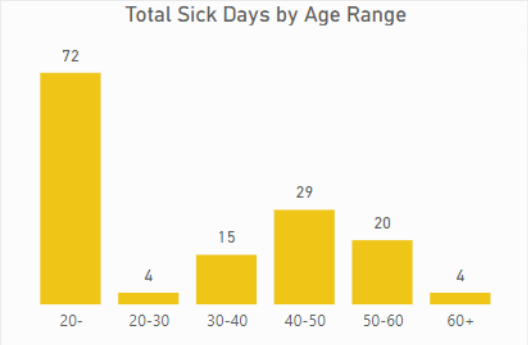
Average Sick Leave Days
0.02
days

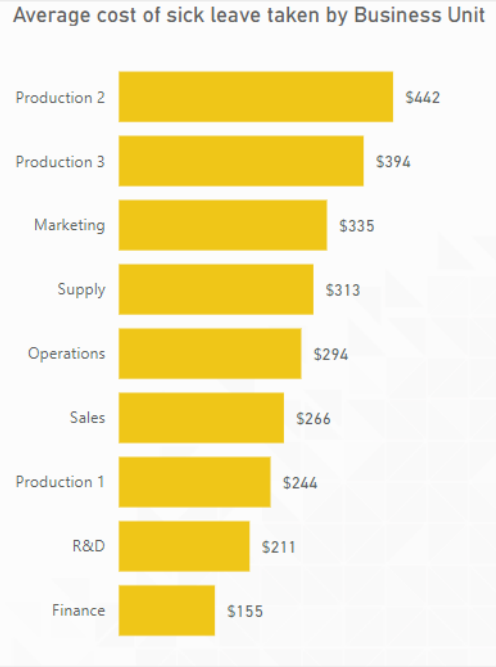
Total sick leave taken
76.5
days

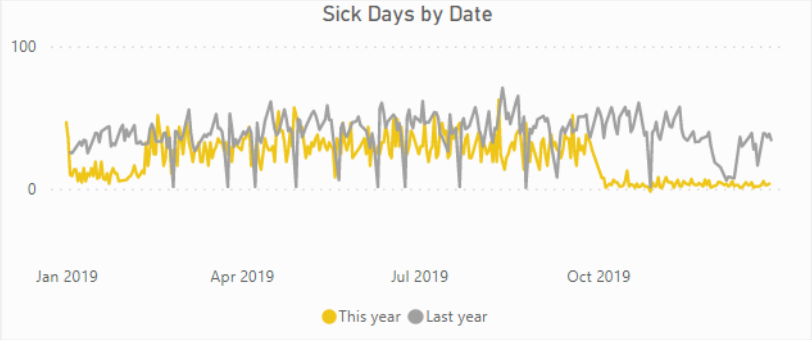
Cost of sick leave taken
$90.0K

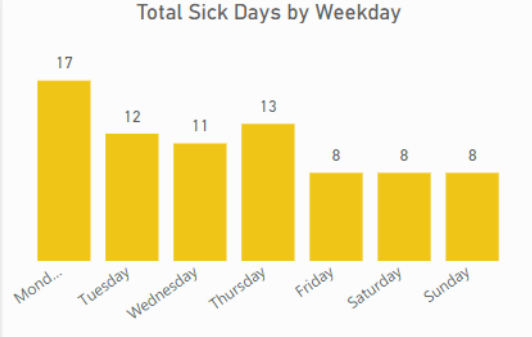
Average cost of sick leave taken
$296











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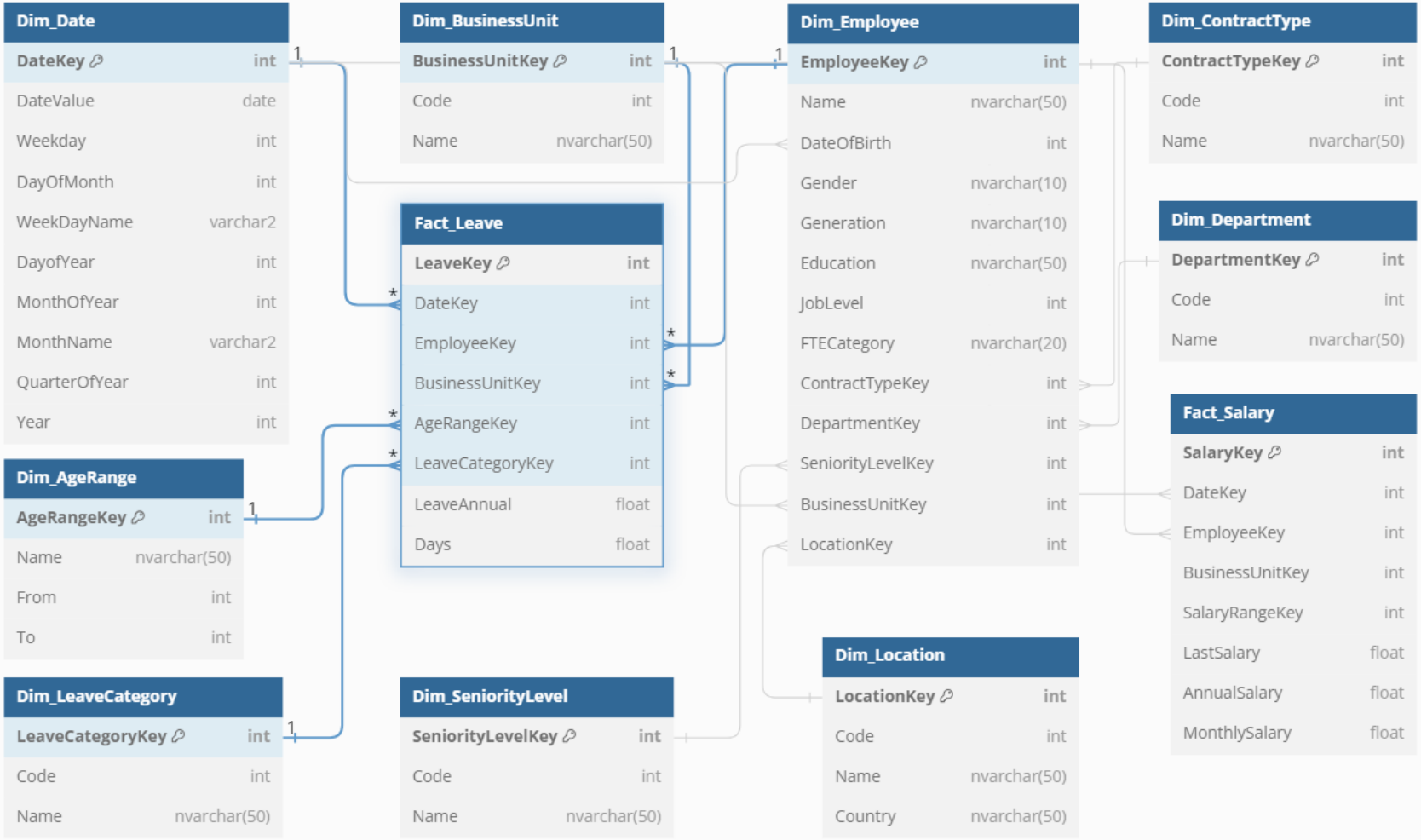
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MonthOfYear int
MonthName varchar2
QuarterOfYear int
Year int
Dim_BusinessUnit
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Name nvarchar(50)
Dim_Employee
EmployeeKey int
Name nvarchar(50)
DateOfBirth int
Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
ContractTypeKey int
DepartmentKey int
SeniorityLevelKey int
BusinessUnitKey int
LocationKey int
Dim_ContractType
ContractTypeKey int
Code int
Name nvarchar(50)
Fact_Leave
LeaveKey int
DateKey int
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Days float
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Fact_Salary
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EmployeeKey int
BusinessUnitKey int
SalaryRangeKey int
LastSalary float
AnnualSalary float
MonthlySalary float
Dim_AgeRange
AgeRangeKey int
Name nvarchar(50)
From int
To int
Dim_LeaveCategory
LeaveCategoryKey int
Code int
Name nvarchar(50)
Dim_SeniorityLevel
SeniorityLevelKey int
Code int
Name nvarchar(50)
Dim_Location
LocationKey int
Code int
Name nvarchar(50)
Country nvarchar(50)

Employee Details

2018 | 2019 | 2020

Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

EmployeeID: 5200586

Personal Information - Active

Employee Name	Skye Culcasi
Date of Birth	16/03/1956
Date of Hire	18/11/1972
Date of Termination	
Education	Diploma

Current Position

Business Unit	Production 1
Job Title	Production Technician I
Location	AUS - Melbourne
Job Level	5
Contract Type	Regular

Financials

Last Salary	$50,591
Cost of Annual Leave balance	$22,738

Last Performance Rating

3 - Exceeds

Leave Taken

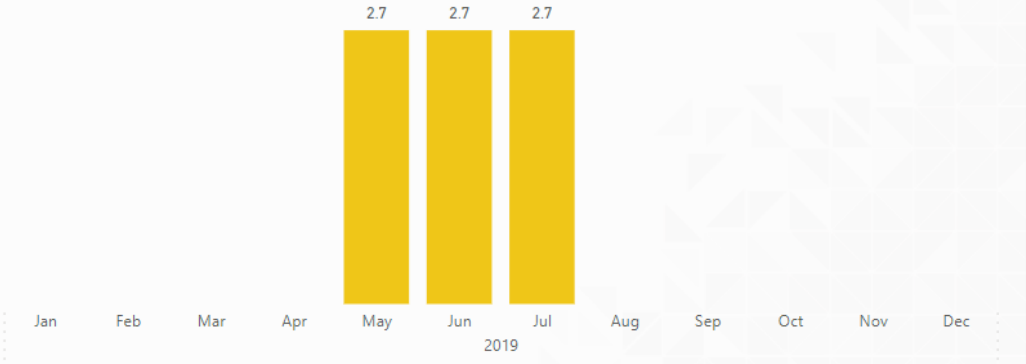
0.0
days

Annual Leave balance

11.8
days

Date	Type	Name	Hours	Cost
11/10/2019	External	Conflict Management	4	$2,000
11/08/2019	External	Power BI	8	$3,600
10/07/2019	External	Conflict Management	4	$2,000
12/06/2019	External	Work, Health & Safety	4	$2,000
Total			**20**	**$9,600**

Leave Taken by Date



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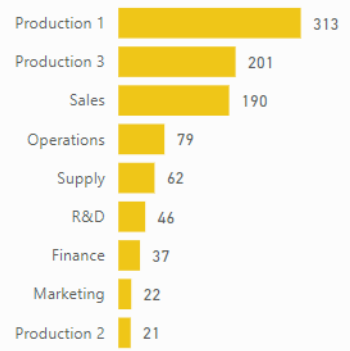
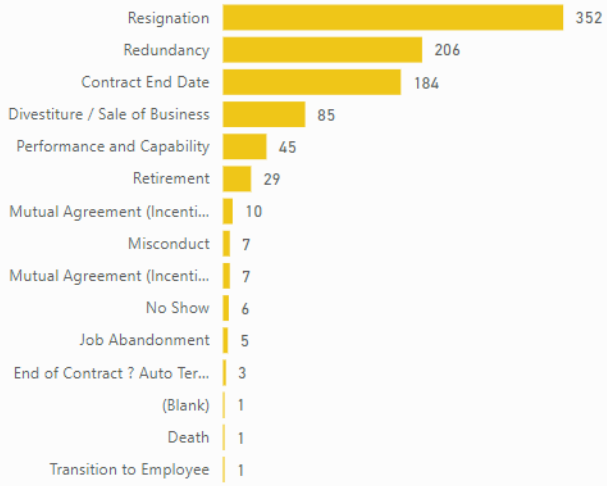
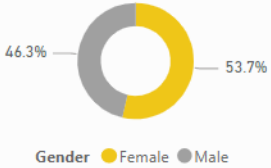
Termination Analysis

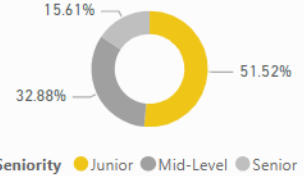
Date range
1/1/2019 9/30/2020

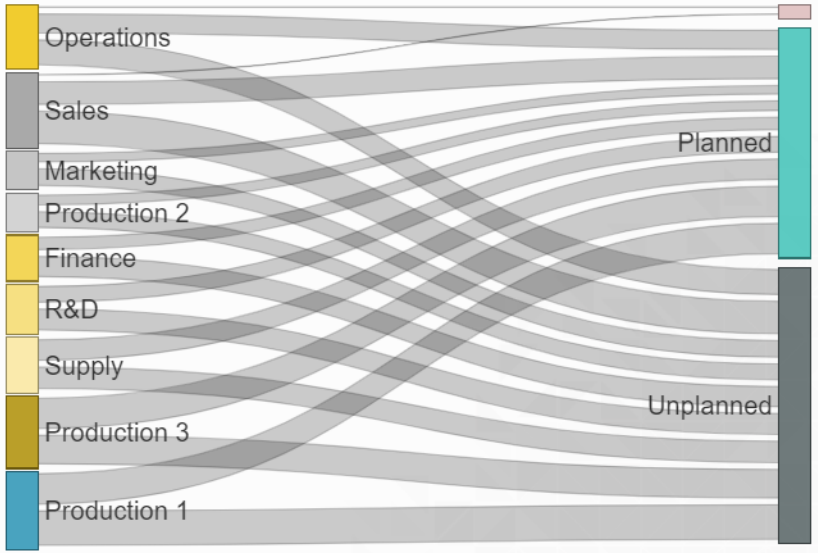
Terminations
940

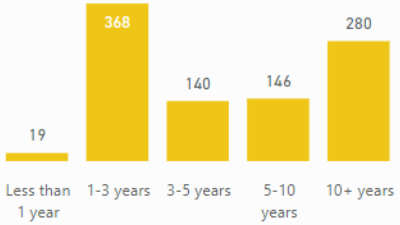
Terminations by Business Unit


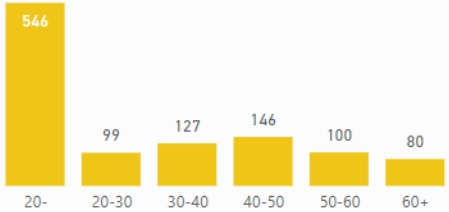
Terminations by Reason


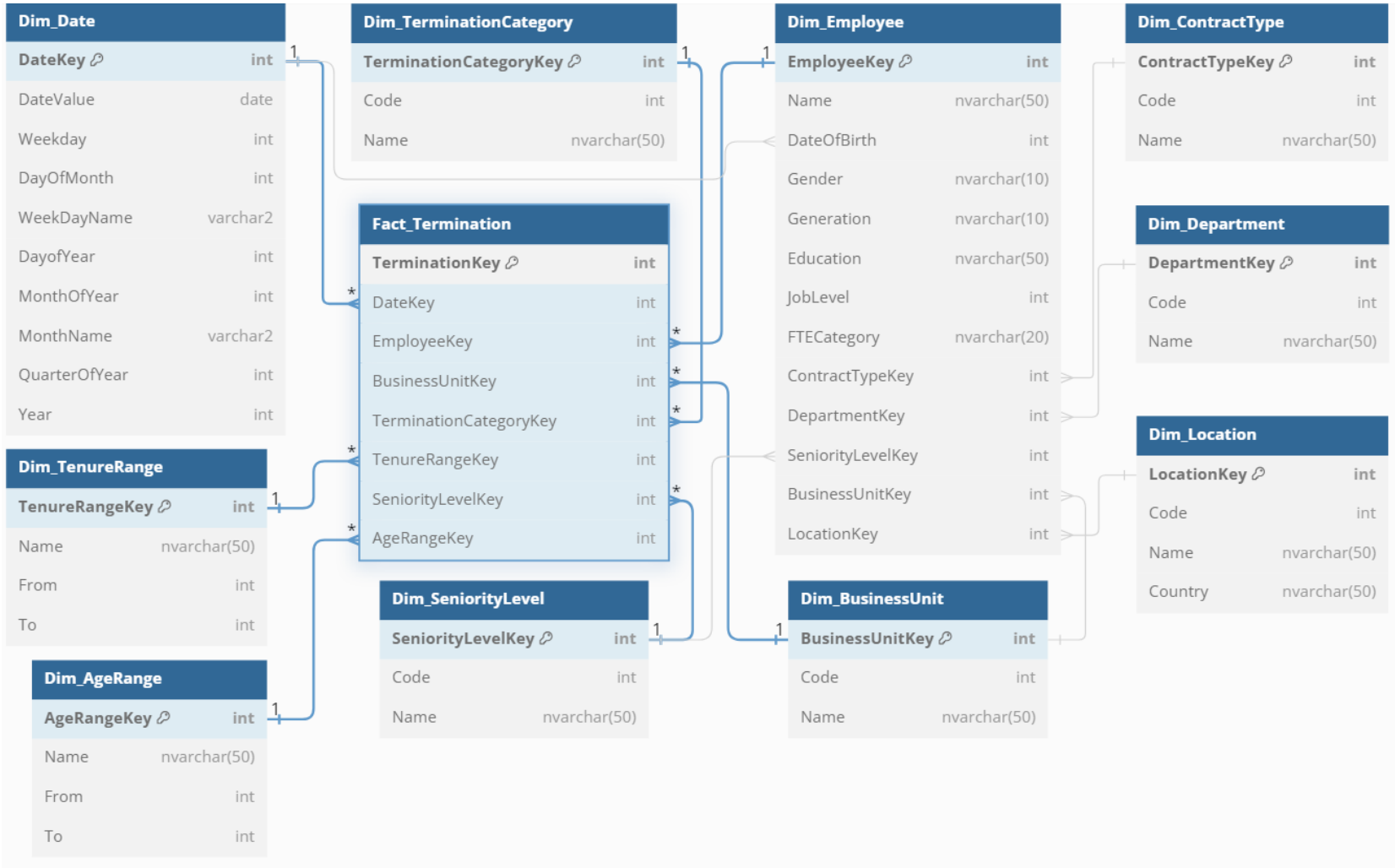
Terminations by Gender


Terminations by Seniority


Termination Category by Business Unit


Terminations by Tenure Range


Terminations by Age Banding
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DateOfBirth int
Gender nvarchar(10)
Generation nvarchar(10)
Education nvarchar(50)
JobLevel int
FTECategory nvarchar(20)
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LocationKey int
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Code int
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AgeRangeKey int
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From int
To int

Thanks for watching