EMPLOYEE DATA ANALYSIS

By Rahul Acharya

CAN YOU CREATE A PIVOT TABLE TO SUMMARIZE THE TOTAL NUMBER OF EMPLOYEES IN EACH DEPARTMENT?

Departments ▾							
	Admin Offices	Executive Office	IT/IS	Production	Sales	Software Engineering	Grand Total
Count	80	24	430	2020	331	115	3000

APPLY CONDITIONAL FORMATTING TO HIGHLIGHT EMPLOYEES
WITH A "PERFORMANCE SCORE" BELOW 3 IN RED.

CALCULATE THE AVERAGE "SATISFACTION SCORE" FOR MALE AND
FEMALE EMPLOYEES SEPARATELY USING A PIVOT TABLE.

Row Labels	Average of Satisfaction Score
Female	3.005945303

Row Labels	Average of Satisfaction Score
Male	3.042488619

CREATE A CHART TO VISUALIZE THE DISTRIBUTION OF "WORK-LIFE BALANCE SCORE" FOR DIFFERENT JOB FUNCTIONS.

Distribution of Work-Life Balance
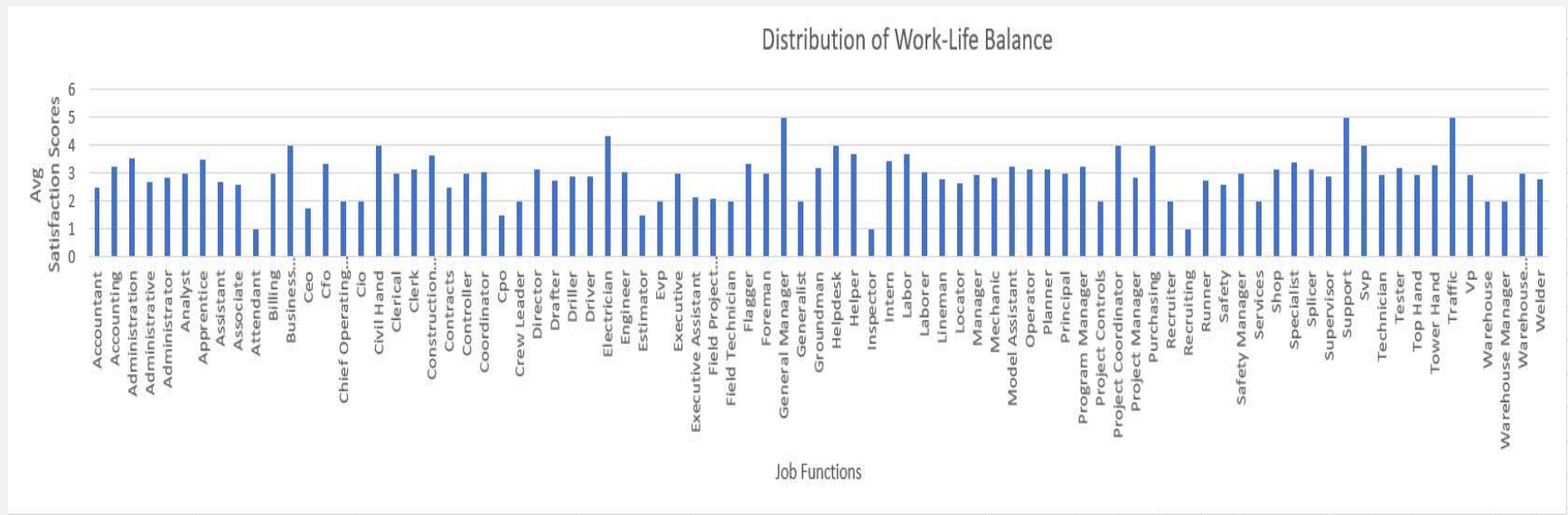
FILTER THE DATA TO DISPLAY ONLY TERMINATED EMPLOYEES AND
FIND OUT THE MOST COMMON "TERMINATION TYPE."

Row Labels	Count of Employee ID
⊟ Terminated for Cause	66
Involuntary	21
Resignation	22
Retirement	10
Voluntary	13
⊟ Voluntarily Terminated	321
Involuntary	86
Resignation	74
Retirement	76
Voluntary	85
Grand Total	387

The most common 'Termination Type' among 'Terminated for Cause' is **'Resignation'**

The most common 'Termination Type' among 'Voluntarily Terminated' is **'Involuntary'**

CALCULATE THE AVERAGE "ENGAGEMENT SCORE" FOR EACH DEPARTMENT USING A PIVOT TABLE

Row Labels	Average of Engagement Score
Admin Offices	2.925
Executive Office	3.375
IT/IS	3.025581395
Production	2.906435644
Sales	2.990936556
Software Engineering	2.973913043

USE VLOOKUP TO FIND THE SUPERVISOR'S EMAIL ADDRESS FOR A SPECIFIC EMPLOYEE

Employee ID		Application Date	First Name	Last Name	Gender	Date of Birth	Phone Number	Email			
	1001	03-Jun-23	Scott	Sheppard	Male	31-08-1992	421-429-7655x39421	perezjanet@example.org			
	1002	15-May-23	Stanley	Lewis	Male	29-04-1965	+1-451-574-5308x1681	grossmark@example.com			
	1003	04-Aug-23	Javier	Li	Female	10-03-1973	(858)901-5499	katiemaldonado@example.com			
	1004	28-Jul-23	Christopher	Johnston	Other	04-04-2001	(853)681-1839x2010	sheila73@example.com			
	1005	05-Jun-23	Melissa	Hicks	Other	17-06-1978	364-575-8478x67812	emilypatterson@example.org			
	1006	26-Jul-23	Christian	Maddox	Female	14-06-1983	(894)940-2919	pvelasquez@example.net			
	1007	09-Jun-23	Paul	Hammond	Female	16-08-1963	##################	aclayton@example.net			
	1008	15-Jul-23	Madison	Williamson	Male	07-09-1978	001-902-992-9557x692	jeffreyellis@example.com			
Formula		Supervisor's mail id:									
VLOOKUP(A55,recruitment_data.csv!$A$1:$R$3001,8,0)		pvelasquez@example.net									

CAN YOU IDENTIFY THE DEPARTMENT WITH THE HIGHEST AVERAGE "EMPLOYEE RATING?"

Row Labels	Average of Current Employee Rating
Admin Offices	3.025
Executive Office	2.791666667
IT/IS	2.969767442
Production	2.982178218
Sales	2.909365559
Software Engineering	2.904347826

CREATE A SCATTER PLOT TO EXPLORE THE RELATIONSHIP
BETWEEN "TRAINING DURATION (DAYS)" AND "TRAINING COST."

Training Duration(days) vs Training Cost

BUILD A PIVOT TABLE THAT SHOWS THE COUNT OF EMPLOYEES BY "RACEDESC" AND "GENDERCODE."

RaceDesc	GenderCode	Count of Employee ID
Asian	Female	346
	Male	283
Asian Total		629
Black	Female	346
	Male	272
Black Total		618
Hispanic	Female	325
	Male	247
Hispanic Total		572
Other	Female	318
	Male	264
Other Total		582
White	Female	347
	Male	252
White Total		599
Grand Total		3000

USE INDEX AND MATCH FUNCTIONS TO FIND THE "TRAINING PROGRAM NAME" FOR AN EMPLOYEE WITH A SPECIFIC ID.

| Employee ID	Training Date	Training Program	Training Type	Training Outcom	Location	Trainer	Training Dura	Training Cost						
1001	21-Sep-22	Customer Service	Internal	Failed	Port Greg	Amanda Daniels	4	511						
1002	19-Jul-23	Leadership Devel	Internal	Failed	Brandonview	Brittany Chambers	2	582						
1003	24-Feb-23	Technical Skills	Internal	Incomplete	Port Briannahaven	Mark Roberson	4	777						
1004	12-Jan-23	Customer Service	Internal	Completed	Knightborough	Richard Fisher	2	824						
1005	12-May-23	Communication S	External	Passed	Bruceshire	Heather Shaffer	4	146						
1006	08-May-23	Project Managem	Internal	Failed	Erinfort	Michael Duke	2	838						

Training Program Name	Formula
Technical Skills	INDEX([training_and_development_data1.xlsx]training_and_development_data!$A$1:$I$3001, MATCH($A$124,[training_and_development_data1.xlsx]training_and_development_data!$A$1: $A$3001,0),3)

CREATE A MULTI-LEVEL PIVOT TABLE TO ANALYZE THE
"PERFORMANCE SCORE" BY "BUSINESSUNIT" AND
"JOBFUNCTIONDESCRIPTION."

Row Labels	Count of Performance Score
⊞ BPC	303
⊞ CCDR	300
⊞ EW	302
⊞ MSC	296
⊞ NEL	304
⊞ PL	301
⊞ PYZ	299
⊞ SVG	304
⊞ TNS	297
⊞ WBL	294
Grand Total	3000

If you expanded the 'Business Unit' you will see a list of 'JobFunctionDescription'
and their 'PerformanceScores'

DESIGN A DYNAMIC CHART THAT ALLOWS USERS TO SELECT AND VISUALIZE THE PERFORMANCE OF ANY EMPLOYEE OVER TIME.
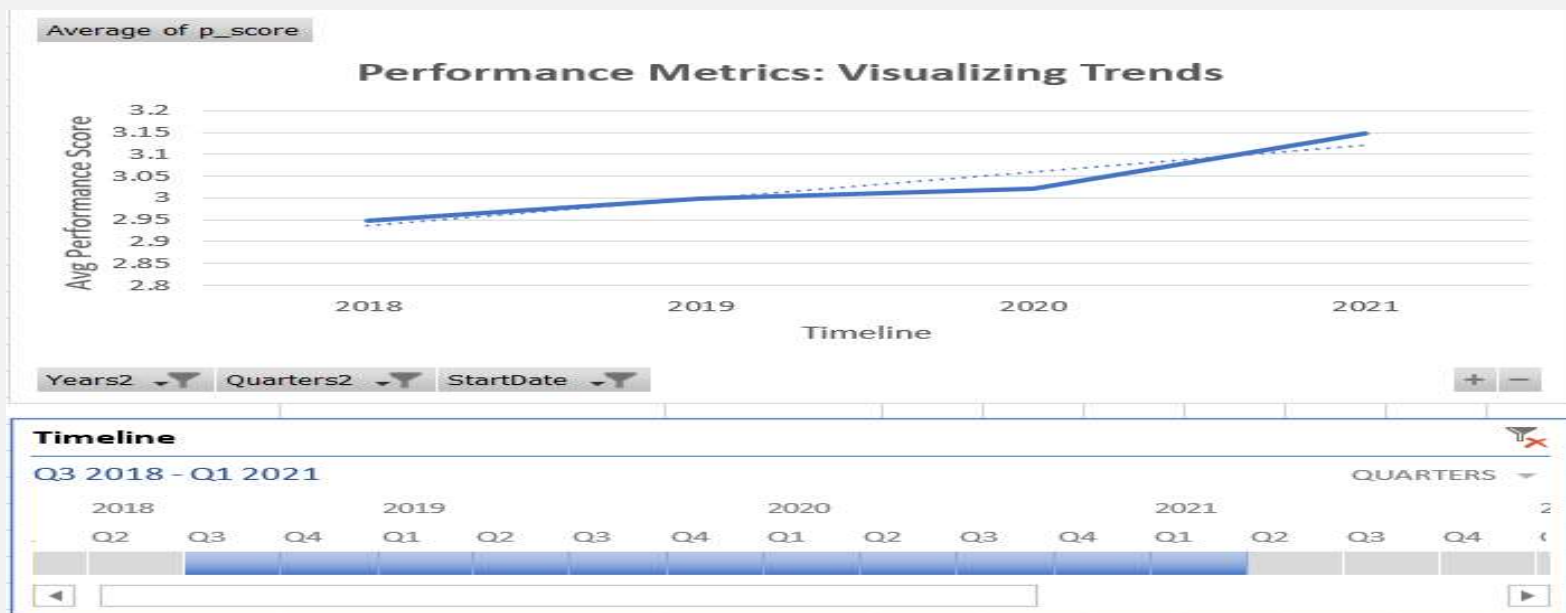
CALCULATE THE TOTAL TRAINING COST FOR EACH "TRAINING PROGRAM NAME" AND DISPLAY IT IN A BAR CHART.

Row Labels	Sum of Training Cost
Communication Skills	$3,65,023
Customer Service	$3,20,575
Leadership Development	$3,23,902
Project Management	$3,43,313
Technical Skills	$3,23,073
Grand Total	$16,75,886

Training program Name vs Training Cost

APPLY ADVANCED CONDITIONAL FORMATTING TO HIGHLIGHT THE TOP 10% AND BOTTOM 10% OF EMPLOYEES BASED ON "CURRENT EMPLOYEE RATING."

USE A CALCULATED FIELD IN A PIVOT TABLE TO DETERMINE THE AVERAGE "ENGAGEMENT SCORE" PER YEAR..

Row Labels	Average of Engagement Score
2022	**2.918281382**
Qtr3	2.96347032
Qtr4	2.891855808
2023	**2.953667954**
Qtr1	2.902216428
Qtr2	3.013679891
Qtr3	2.93968254
Grand Total	**2.939666667**

CREATE A HISTOGRAM TO UNDERSTAND THE DISTRIBUTION OF "EXITDATE" FOR TERMINATED EMPLOYEES.

UTILIZE THE SUMPRODUCT FUNCTION TO CALCULATE THE TOTAL TRAINING COST FOR EMPLOYEES IN A SPECIFIC LOCATION.

SumProduct for "Port Greg"	Formula
510.83	SUMPRODUCT((([training_and_development_data1.xlsx]training_and_development_data!$F$2:$F$3001="Port Greg")*([training_and_development_data1.xlsx]training_and_development_data!$I$2:$I$3001))

DEVELOP A DASHBOARD THAT PROVIDES AN OVERVIEW OF KEY HR METRICS, INCLUDING HEADCOUNT, PERFORMANCE, AND TRAINING COSTS, USING CHARTS AND PIVOT TABLES.