



JORDAN UNIVERSITY OF
SCIENCE & TECHNOLOGY

CASE STUDY - TABLEAU

STUDENT NAME

STUDENT ID

**LEEN MAMOUN
ALMANASEER**

149615

**LEEN RA'ED ABO
ALHAIJA'A**

146980

**AHMED SAMER
SHANABLEH**

149493

CLASSIFICATION SECTION

This section presents a visual representation of employees' data, with axes representing the average salary and their position *figure 1.1*.

Condition data is overlaid as a color gradient which includes (The calculation field for both age and gender)*figure 1.2* , enabling the exploration of potential correlations between the average salary levels across different positions based on the conditions we made in *figure 1.3* as we labeled them.

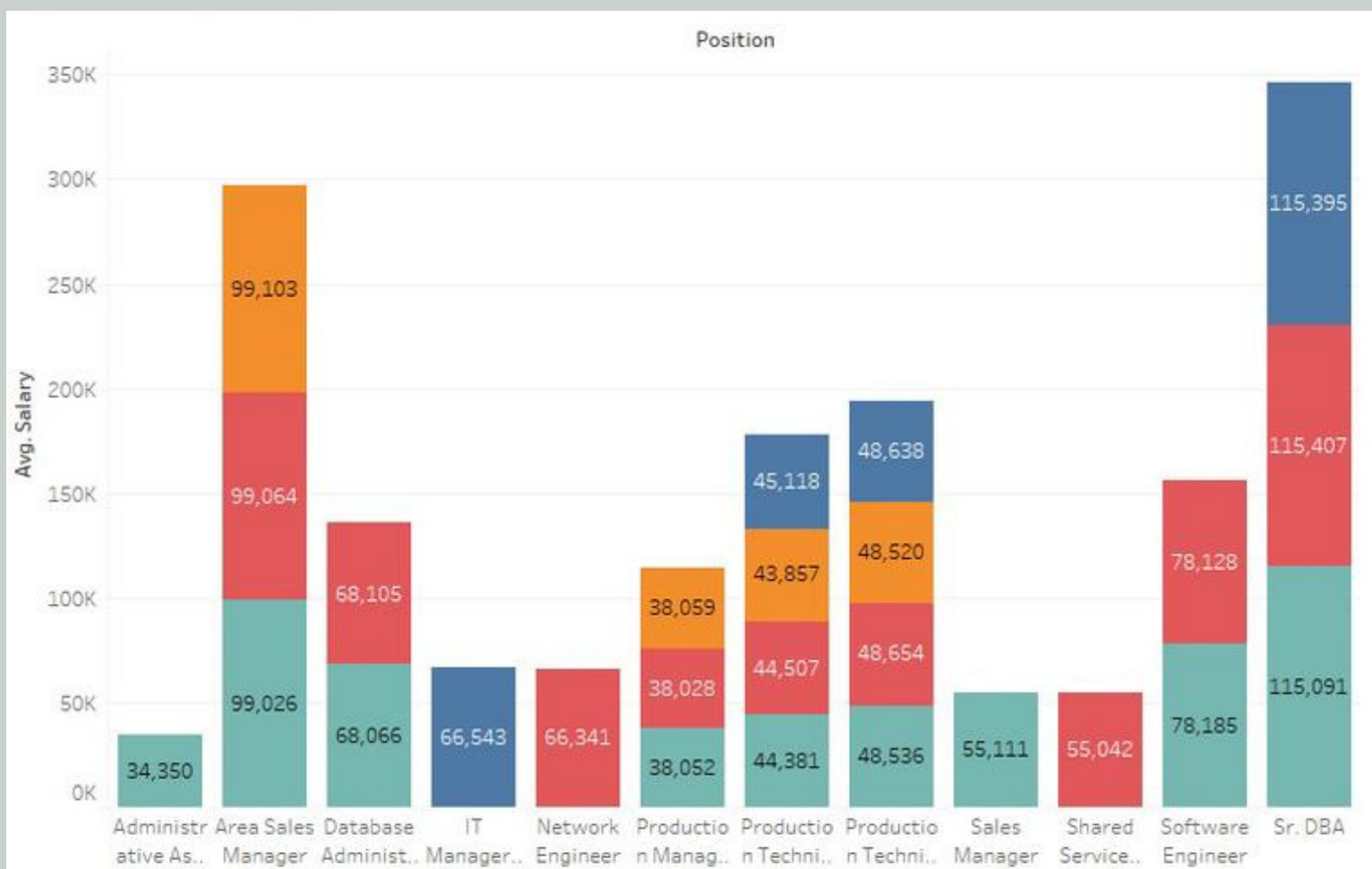


Figure 1.1: Classification

CLASSIFICATION SECTION

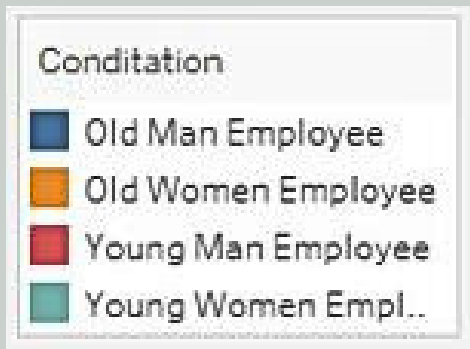


Figure 1.2: Conditions

The calculated field uses the following conditions
figure 1.3:

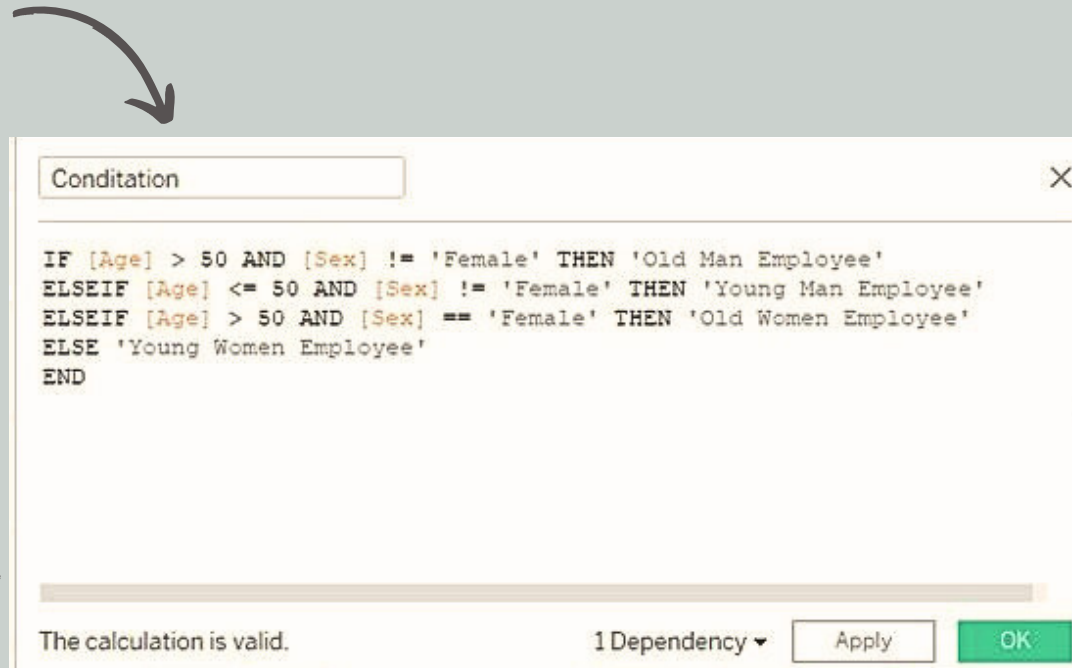


Figure 1.3: Conditions: Calculated field

For the male employees: If the employee is not female ([sex] != 'Female') and their age is less than or equal to 50 ([age] <= 50), they are considered as "Young Man Employee". If the employee is not female ([sex] != 'Female') and their age is greater than 50 ([age] > 50), they are considered an "Old Man Employee".

For Female Employees: If the employee is female ([sex] = 'Female') and their age is less than or equal to 50 ([age] <= 50), they are considered a "Young Woman Employee". If the employee is female ([sex] = 'Female') and their age is greater than 50 ([age] > 50), they are considered an "Old Woman Employee".

Note: We have three values for gender: Female, male, and Male. that's why we have used 'Female' as the condition for female employees in our calculations.

CLUSTERING SECTION

This section employs a scatterplot visualization to show the relationship between employee salary (Column), and rewards (Rows) *figure 2.1* based on the hire date (any day of the month of the year) *figure 2.2*.

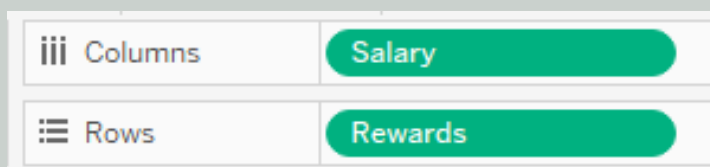


Figure 2.1:

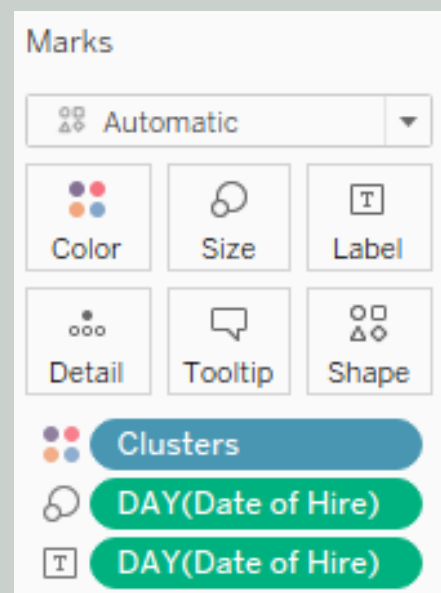


Figure 2.2:

Data points were partitioned by size each size has its own (hiring date), Large -sized circle shows the latest hired employees and the small-sized circle shows the earliest hired employees and other circles are sized gradually between them based on the hire date as we labeled the hiring date on the scatterplot *figure 2.3* *figure 2.4* using K-means clustering we divided the data points into 3 clusters *figure 2.5*, allowing for analysis of the scatterplot within groups in terms of number of items and centroid points.

CLUSTERING SECTION

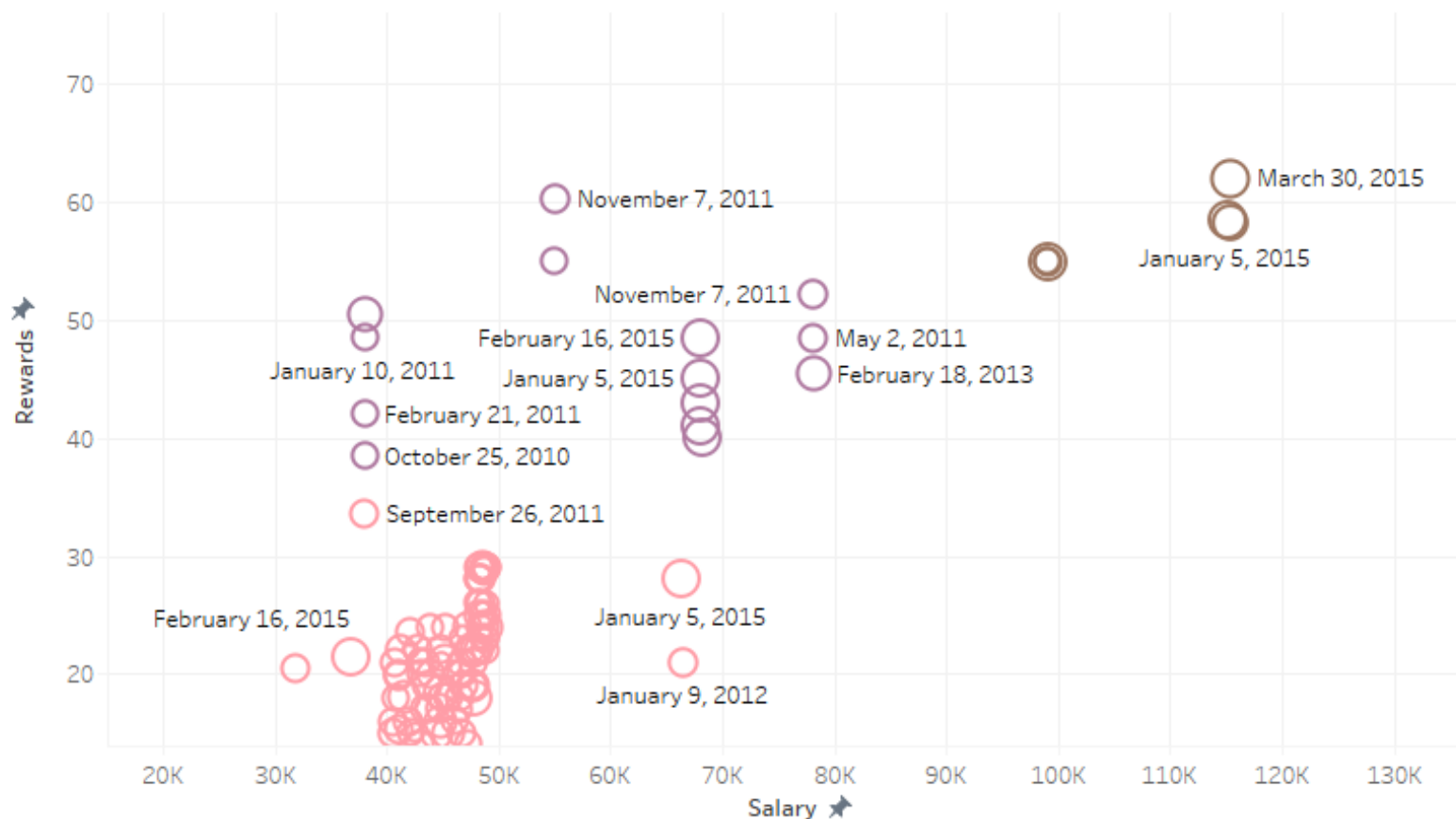


Figure 2.3: Clustering

It appears that a growing relationship between rewards and salaries, with the latest hires receiving higher amounts.

Employees with the earliest hire date

DAY(Date of Hire)

• June 25, 2007

● March 30, 2015

Figure 2.4: Continuous representation of sizes based on hiring date

Employees with the latest hire date

Shows the lowest values for both rewards and salaries.

Shows the middle values for both rewards and salaries.

Shows the highest values for both rewards and salaries.

Clusters

- Cluster 1
- Cluster 2
- Cluster 3

Figure 2.5: Clusters

CLUSTERING SECTION

figure 2.6 shows the clustering summary in terms of Number of items , centroid points as well as the sum of squares within-group and between-group for the two variables (salary and rewards).

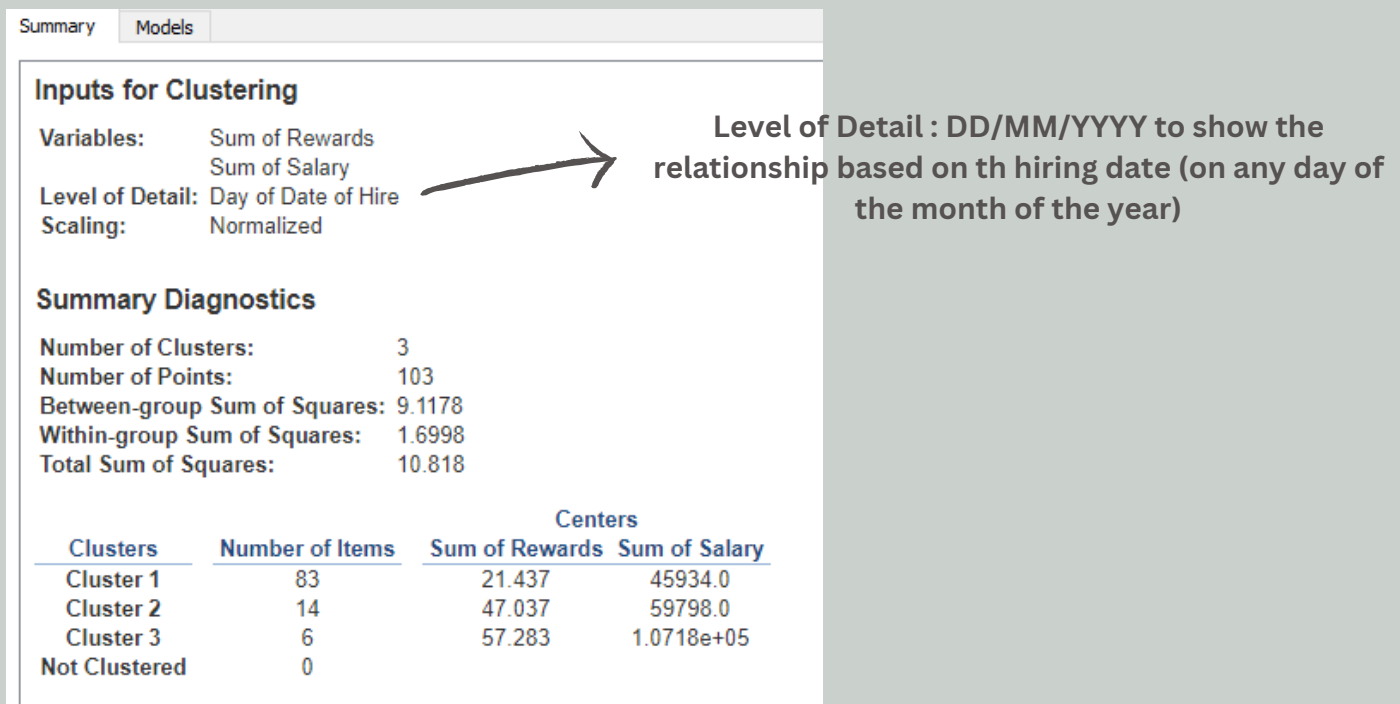


Figure 2.6: Summary

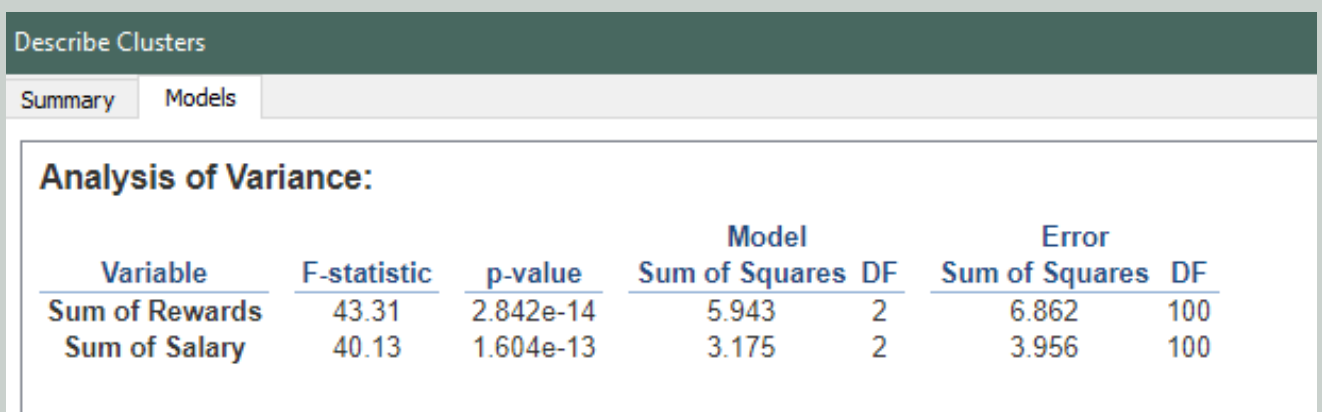


Figure 2.7: Models: Analysis of Variance