



# IBM EMPLOYEE DATA ANALYSIS

A CORPORATION WOULD ALWAYS COLLECT BASIC INFORMATION ABOUT AN EMPLOYEE BEFORE HIRING THEM TO ESTABLISH WHETHER OR NOT THEY ARE QUALIFIED FOR THE ROLE. WE ESTIMATE THAT AGE, MONTHLY INCOME, TOTAL WORKING YEARS, PERCENT WAGE INCREASE, YEARS AT FIRM, AND DEPARTMENT ALL HAVE A SUBSTANTIAL IMPACT ON EMPLOYEE ATTRITION. PLEASE KEEP IN MIND THAT THIS IS A FICTITIOUS DATA SET GENERATED BY IBM DATA SCIENTISTS.



## AGE GREATER THAN 35 YEARS OLD

BASED ON OUR RESULT OF ONE SAMPLE TEST HYPOTHESIS TESTING, THE MEAN AGE OF THE IBM EMPLOYEES IS GREATER THAN 35 YEARS OLD.



## POSITIVE RELATIONSHIP BETWEEN MONTHLY INCOME AND TOTAL WORKING YEARS

WE DISCOVERED THAT THERE IS A POSITIVE RELATIONSHIP BETWEEN MONTHLY INCOME OF EMPLOYEES AND THEIR TOTAL WORKING YEARS BY USING CORRELATION TEST. THIS MEANS IF AN EMPLOYEE WANTS TO GET MORE INCOMES FROM WORKING, HE/SHE CAN ACHIEVE IT BY WORKING IN IBM FOR A LONG TIME.



## NO LINEAR RELATIONSHIP BETWEEN SALARY HIKE AND YEARS AT COMPANY

BY DOING REGRESSION ANALYSIS, WE FOUND OUT THERE IS NO LINEAR RELATIONSHIP BETWEEN SALARY HIKE AND YEARS AT COMPANY. THE PERCENTAGE OF SALARY INCREASE IS NOT DEPENDENT ON THE INCREASED NUMBER OF EMPLOYEE YEARS AT THE COMPANY, AS THE DEPENDENT OF BOTH SALARY HIKE PERCENTAGES TO THE NUMBER OF YEARS IS ALMOST NON-EXISTENT



## DEPARTMENT PROPORTIONS

R&D 65%



SALES 30%



HR 5%

