

Case study on correlation and regression analysis

The table below shows some data from the early days of the Italian clothing company Benetton. Each row in the table shows Benetton's sales for a year and the amount spent on advertising that year. In this case, our outcome of interest is sales—it is what we want to predict.

Year	Sales (Million Euro)	Advertising (Million Euro)
1	651	23
2	762	26
3	856	30
4	1,063	34
5	1,190	43
6	1,298	48
7	1,421	52
8	1,440	57
9	1,518	58

1. First, the manager of Benetton wants to check whether there is any relationship between the Sales figures and the amount spent on Advertising. So, he should check that.
2. The manager of the clothing company wants to test whether his model is predicting the exact or nearby figures to the sales figures already given? What will he do?
3. What will be the squared error between the actual values for Sales and predicted values for Sales?
4. If the advertising was done for an amount of 60 Million Euros for the 10th year, what will be the Sales figure for the 10th year?

Write your answers in a word doc and show the calculations in the excel sheet. Convert the doc file into a PDF file. Submit the excel sheet with the calculations and the PDF file in a zip file and submit it in Paatshala. The name of the folder should be your name.

