**Week 1 – Case study: Custom Tailor BN2255 Business Analytics in practice**

A custom tailor company wishes to open a small factory-shop in Stratford-upon-Avon for making custom designed business suits.

1) The selected location for the factory-shop would allow for the maximum production of 150 suits a month. Fixed cost at that particular location would be around £42,000 a month and the average cost of a suit is estimated to be approximately £240. The company is still unsure at the average price it will adopt for each suit. It is currently considering these scenarios:

i) £559

ii) £579

iii) £599

iv) £619

1. Create a model to assess potential profit at the various suggested price points. Try to make the model as flexible as possible.
2. Find the number of suits the company needs to sell each month to break even (ie the number of suits where revenue equals costs).

2) The company produces 5 styles of suites, each priced differently. The prices charged for each style of suit are given in the table below:

|  |  |
| --- | --- |
| **Suit style** | **Price** |
| Basic | 399 |
| Basic Smart | 459 |
| Smart Deluxe | 559 |
| Designer | 650 |
| Designer Deluxe | 800 |

The sales of the company for the first year of operations are given below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sales per Suit style** | |  |  |  |  |
| Month | **Basic** | **Basic Smart** | **Smart Deluxe** | **Designer** | **Designer Deluxe** |
| **January** | 36 | 26 | 14 | 11 | 5 |
| **February** | 47 | 33 | 21 | 17 | 7 |
| **March** | 68 | 48 | 27 | 22 | 10 |
| **April** | 37 | 27 | 18 | 15 | 5 |
| **May** | 58 | 40 | 27 | 22 | 9 |
| **June** | 49 | 33 | 28 | 24 | 8 |
| **July** | 80 | 54 | 42 | 35 | 13 |
| **August** | 77 | 53 | 34 | 28 | 12 |
| **September** | 74 | 52 | 29 | 23 | 11 |
| **October** | 61 | 43 | 24 | 19 | 9 |
| **November** | 32 | 22 | 22 | 19 | 5 |
| **December** | 37 | 25 | 23 | 20 | 6 |

1. Use the information provided in part (1) and the above tables to calculate the profit that the company made during its first year.
2. Produce graphs for revenue per suite style, monthly sales (overall and per style) and monthly profit.
3. Given your results, what would you advice the company to focus on to improve its position?