**Case 1**

**Forecasting**

1. **Background\***

M&L Manufacturing makes various components for printers and copiers. The operations manager wants to begin formal forecasting for two products as part of his new initiative. These products are important for several reasons. First, they account for a disproportionately large share of the company’s profits. Second, the manager believes that one of these products will become increasingly important to future growth plans; and third, the other product has experienced periodic out of stock instances.

The manager has compiled data on product demand for the two products from order records for the previous 14 weeks. These are shown in the following table:

|  |  |  |
| --- | --- | --- |
| Week | Product 1 | Product 2 |
| 1 | 50 | 40 |
| 2 | 54 | 38 |
| 3 | 57 | 41 |
| 4 | 60 | 46 |
| 5 | 64 | 42 |
| 6 | 67 | 41 |
| 7 | 90 | 41 |
| 8 | 76 | 47 |
| 9 | 79 | 42 |
| 10 | 82 | 43 |
| 11 | 85 | 42 |
| 12 | 87 | 49 |
| 13 | 92 | 43 |
| 14 | 96 | 44 |

1. **Questions**
2. What are some of the potential benefits of a more formalized approach to forecasting?
3. Prepare a weekly forecast for the 15th week for each product. Briefly explain why you chose the methods you used.
4. If you have used several methods, perform evaluation measures: MAPE, MAD, MSE.