

Attachment
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- c. Develop a linear regression model, and compute a forecast for June, July, and August.
 - d. Using a weighted moving average with weights of 0.30, 0.25, 0.20, 0.15, and 0.10, what is June's forecast?
11. Two experienced managers are resisting the introduction of a computerized exponential smoothing system, claiming that their judgmental forecasts are much better than any computer could do. Their past record of predictions is as follows:

Week	Actual Demand	Manager's Forecast
1	4,000	4,500
2	4,200	5,000
3	4,200	4,000
4	3,000	3,800
5	3,800	3,600
6	5,000	4,000
7	5,600	5,000
8	4,400	4,800
9	5,000	4,000
10	4,800	5,000

Based on whatever calculations you think appropriate, are the manager's judgmental forecasts performing satisfactorily?

12. A chain of grocery stores had the following weekly demand (cases) for a particular brand of laundry soap:

Week	1	2	3	4	5	6	7	8	9	10
Demand	31	22	33	26	21	29	25	22	20	26

- a. Develop three- and four-period moving average forecasts, and compute MSE for each. Which provides the better forecast? What would be your forecast for week 11?

13. Sales of surfboards for the last 5 years are shown here in millions of dollars.

Year, Quarter	Time (X)	Sales (Y)
1, Q1	1	2
1, Q2	2	4
1, Q3	3	5
1, Q4	4	4
2, Q1	5	3
2, Q2	6	5
2, Q3	7	7
2, Q4	8	5
3, Q1	9	4
3, Q2	10	8
3, Q3	11	9
3, Q4	12	6
4, Q1	13	5
4, Q2	14	8
4, Q3	15	10
4, Q4	16	6
5, Q1	17	6
5, Q2	18	7
5, Q3	19	9
5, Q4	20	7

- a. Forecast the four quarters of Year 6 using *CBPredictor*.
- b. If annual sales in Year 6 were forecast to be \$40 million, what is the forecast of sales by quarter?

CASES

BANKUSA: FORECASTING HELP DESK DEMAND BY DAY (A)

"Hello, is this the Investment Management Help Desk?" said a tired voice on the other end of the telephone line at 7:42 A.M. "Yes you have the right place, how can I help you?" said Thomas Bourbon, the customer service representative (CSR) who received this inquiry. "Well, I've got a problem. My best customer, with assets of over \$10 million in our bank, received his monthly trust account statement. He says we inaccurately computed the market value of one of his stocks by using an inaccurate share price. He says this error makes his statement \$42,000 too low. I assured him we would research the problem and get back to him by the end of the day. Also, do you realize that I

waited over 4 minutes before you answered my telephone call!" said the trust administrator, Chris Eddins. "Mr. Eddins, give me the customers' account number and the stock in question, and I'll get back to you within the hour. Let's solve the customer's problem first. I apologize for the long wait," said Bourbon in a positive and reassuring voice.

The Help Desk supports fiduciary operations activities worldwide by answering questions and inquiries from company employees, such as portfolio managers, stock traders, backroom company process managers, branch bank managers, accountants, and trust account administrators. These internal customers originate over