Scenario Analysis: Cars Sold

A finance manager employed by an automobile dealership believes that the number of cars sold in his local market can be predicted by the interest rate charged for a loan.

|  |  |
| --- | --- |
| Interest Rate (%) | Number of Cars Sold (100s) |
| 3 | 10 |
| 5 | 7 |
| 6 | 5 |
| 8 | 2 |

The finance manager performed a regression analysis of the number of cars sold and interest rates using the sample of data above. Shown below is a portion of the regression output.

|  |  |
| --- | --- |
| Regression Statistics | |
| Multiple *R* | 0.998868 |
| *R2* | 0.997738 |

|  |  |
| --- | --- |
|  | Coefficient |
| Intercept | 14.88462 |
| Interest Rate | -1.61538 |

1. Are there factors other than interest rate charged for a loan that the finance manager should consider in predicting future car sales?
2. Is interest rate charged for a loan the most important factor to be considered in predicting future car sales? Explain your reasoning.The dealership’s vice-president of marketing has requested a sales forecast at the prevailing interest rate of 7%.
3. As finance manager, what reasons would you convey to the vice-president in recommending this forecasting model?
4. Is the prediction of car sales at 7% a reflection of the current downturn in the economy? How might this impact the dealership’s business?