

Discussion

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Perfecting Linear Regression Predictions It is undeniable that linear regression modelling has become one of the most versatile and useful method of predicting the future outcomes based on past events. Whereas old regression models relied on simple calculations, powerful computing computers have made it possible to do regression on hundreds of variables. Using regression analysis for predicting quarterly purchases of building materials may not yield accurate results because of many factors such as rise of unpredictable situations, duration in which data points are taken, and the number of variables used for regression analysis.

First, regression analysis uses data from past events and therefore may not be accurate if unaccounted event occurs. For instance, a natural catastrophe such as earthquake may stall all building constructions in a given area forcing customers to stop buying. If linear regression uses previous data where catastrophe was absent, then its outcome will be inaccurate. Such errors can be avoided by adding as many variables as feasibly possible to the regression model used (Montgomery, 2011).

Duration in which regression data points were taken determines the accuracy of the regression results. More data points are more likely to yield more accurate results. For instance, monthly sales spanning about five years can provide accurate regression results of sales as opposed to quarterly sales of past one year. Lastly, regression modelling is only as accurate as the variables used (Seber et al. 2003). Too few variables may not give accurate predictions because they may not give accurate history. Too many variables may not give accurate prediction either because some of the events may not happen in future. To improve the results, more data points should be used in

conjunction with a fair number of multiple variables.

References

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