What is the step-by-step process for Naive Forecasting in Excel?

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Naive forecasting in Excel is a simple and straightforward method for predicting future values based on past data. The step-by-step process for implementing this method involves the following steps:

1. Collect and organize the historical data: The first step is to gather and arrange the data in a tabular format in Excel. This data should include the time period and corresponding values.

2. Create a line graph: Once the data is organized, create a line graph to visualize the trend and any potential patterns.

3. Calculate the average: Next, calculate the average of the historical data using the AVERAGE function in Excel.

4. Create a new column: In a new column, enter the average value for each time period.

5. Extend the trendline: Extend the trendline for the new column to predict future values.

6. Forecast the future values: Based on the extended trendline, input the predicted values for the future periods in a new column.

7. Compare with actual data: Finally, compare the predicted values with the actual values to evaluate the accuracy of the forecast.

This step-by-step process can be repeated for different time periods to make multiple predictions. Naive forecasting in Excel is a quick and easy way to generate basic forecasts, but it should be used with caution as it does not take into account any external factors or potential changes in the trend.

Naive Forecasting in Excel: Step-by-Step Example

A naive forecast is one in which the forecast for a given period is simply equal to the value observed in the previous period.

For example, suppose we have the following sales of a given product during the first three months of the year:

Month	Actual Sales
January	34
February	37
March	44

The forecast for sales in April would simply be equal to the actual sales from the previous month of March:

Month	Actual Sales	Forecasted Sales
January	34	
February	37	
March	44	
April	?	44

Although this method is simple, it tends to work surprisingly well in practice.

This tutorial provides a step-by-step example of how to perform naive forecasting in Excel.

Step 1: Enter the Data

First, we'll enter the sales data for a 12-month period at some imaginary company:

	A	B	C	D	E
1	**Month**	**Actual Sales**			
2	January	34			
3	February	37			
4	March	44			
5	April	47			
6	May	48			
7	June	48			
8	July	46			
9	August	43			
10	September	32			
11	October	27			
12	November	26			
13	December	24			
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Step 2: Create the Forecasts

Next, we'll use the following formulas to create naive forecasts for each month:

	A	B	C	D	E
1	**Month**	**Actual Sales**	**Forecasted Sales**	Formula used	
2	January	34			
3	February	37	34	=B2	
4	March	44	37	=B3	
5	April	47	44	=B4	
6	May	48	47	=B5	
7	June	48	48	=B6	
8	July	46	48	=B7	
9	August	43	46	=B8	
10	September	32	43	=B9	
11	October	27	32	=B10	
12	November	26	27	=B11	
13	December	24	26	=B12	
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Step 3: Measure the Accuracy of the Forecasts

Lastly, we need to measure the accuracy of the forecasts. Two common metrics used to measure accuracy include:

Mean absolute percentage errorMean Absolute Deviation

The following image shows how to calculate mean absolute percentage error:

	A	B	C	D	E
1	**Month**	**Actual Sales**	**Forecasted Sales**	**Absolute Percent Error**	Formula used
2	January	34			
3	February	37	34	8.11	=ABS(B3-C3)/B3*100
4	March	44	37	15.91	=ABS(B4-C4)/B4*100
5	April	47	44	6.38	=ABS(B5-C5)/B5*100
6	May	48	47	2.08	=ABS(B6-C6)/B6*100
7	June	48	48	0.00	=ABS(B7-C7)/B7*100
8	July	46	48	4.35	=ABS(B8-C8)/B8*100
9	August	43	46	6.98	=ABS(B9-C9)/B9*100
10	September	32	43	34.38	=ABS(B10-C10)/B10*100
11	October	27	32	18.52	=ABS(B11-C11)/B11*100
12	November	26	27	3.85	=ABS(B12-C12)/B12*100
13	December	24	26	8.33	=ABS(B13-C13)/B13*100
14			**MAPE**	9.90	=AVERAGE(D3:D13)
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The mean absolute percentage error turns out to be 9.9%.

And the following image shows how to calculate mean absolute deviation:

	A	B	C	D	E
1	**Month**	**Actual Sales**	**Forecasted Sales**	**Absolute Deviation**	Formula Used
2	January	34			
3	February	37	34	3.00	=ABS(B3-C3)
4	March	44	37	7.00	=ABS(B4-C4)
5	April	47	44	3.00	=ABS(B5-C5)
6	May	48	47	1.00	=ABS(B6-C6)
7	June	48	48	0.00	=ABS(B7-C7)
8	July	46	48	2.00	=ABS(B8-C8)
9	August	43	46	3.00	=ABS(B9-C9)
10	September	32	43	11.00	=ABS(B10-C10)
11	October	27	32	5.00	=ABS(B11-C11)
12	November	26	27	1.00	=ABS(B12-C12)
13	December	24	26	2.00	=ABS(B13-C13)
14			**Mean Abs. Deviation**	3.45	=AVERAGE(D3:D13)
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The mean absolute deviation turns out to be 3.45.

To know if this forecast is useful, we can compare it to other forecasting models and see if the accuracy measurements are better or worse.