**Time Series Glossary** (from Future Learn: Data to Insight)

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| **Additive decomposition** | Breaking a time series down into 3 parts, trend, seasonal effects and residuals where it is assumed that there are constant underlying seasonal swings (e.g. of the same size every year) that add to the trend value. |
| **Confidence bands** | A band around a time-series forecast to allow for uncertainty. (They do not allow for uncertainties about the realism of the assumptions that went into the prediction.) |
| **Decomposition plot** | A plot built up of 3 parts, the basic Time Series plot with trend, the Seasonal Swing (additive or multiplicative) and the Residuals. |
| **Forecast** | Predict. |
| **Holt-Winters method** | A good general-purpose forecasting-method for time series data where the trend is basically monotone (either rising or falling, not both). |
| **Multiplicative decomposition** | A series which has been broken down into 3 parts, trend, seasonal effects and residuals where it is assumed that there are constant underlying seasonal effects that multiply the trend value rather than adding to it. |
| **Quarterly data** | Data that is reported 4 times a year covering periods of 3 months. |
| **Residuals** (in time series) | The difference between the original series and what “Trend+Seasonal Swing” gives us. |
| **Seasonal patterns** | A basic pattern that repeats regularly over a period of time. (e.g. a repeating months-of-the-year, days-of-the-week, or hours-of-the-day pattern.) |
| **Seasonal series** | A time series with a seasonal pattern. |
| **Time-series data**: | Data collected over time where we are interested in looking at changes over time. |