**EMPIRICAL MODEL**

An empirical model operates on a simple semantic principle: the maker observes a close correspondence between the behavior of the model and that of its referent. Empirical modelling is a generic term for activities that create models by observation and experiment. Empirical Modelling (with the initial letters capitalized, and often abbreviated to EM) refers to a specific variety of empirical modelling in which models are constructed following particular principles.

**DYNAMIC MODEL**

A dynamic model accounts for time-dependent changes in the state of the system. Dynamic models typically are represented by [differential equations](https://en.wikipedia.org/wiki/Differential_equation) or [difference equations](https://en.wikipedia.org/wiki/Difference_equation).

**CONTINUOUS MODEL**

Continuous modelling is the [mathematical](https://en.wikipedia.org/wiki/Mathematical) practice of applying a [model](https://en.wikipedia.org/wiki/Mathematical_model) to [continuous](https://en.wikipedia.org/wiki/Continuous_variable) data (data which has a potentially infinite number, and divisibility, of attributes). They often use [differential equations](https://en.wikipedia.org/wiki/Differential_equation) and are converse to [discrete modelling](https://en.wikipedia.org/wiki/Discrete_modelling).

**STOCHASTIC MODEL**

A stochastic model is a tool for estimating probability distributions of potential outcomes by allowing for random variation in one or more inputs over time. The random variation is usually based on fluctuations observed in historical data for a selected period using standard time-series techniques.