

This article on **Trend Intra & Extrapolation** is a **stub**. You can help the Foresight Wiki by <u>expanding it</u> with new sections on the usage of this method in foresight exercises.

The basis of **Trend Extrapolation** is to locate a trend that is apparent over time, and project it forward based on data concerning the rates of change and the extent of change achieved. In shorter-term forecasts this is often a matter of extending a linear or exponential curve (e.g. economic growth, power or diffusion of a technology). In the longer-term, limits to growth will often be encountered? there may be a limit to the size of the population to which a technology or cultural practice can diffuse for example, and various other types of trend curve may be fitted to the data (for example, the well-known s-shaped logistic curve).

The FOR-LEARN Guide to Creativity Methods

This is a summary of the article on **Trend Intra & Extrapolation** from the FOR-LEARN guide. To read the full article go <u>here</u>.

Overall description

Some of the issues affecting trend extrapolations are:

- Do the data really show a trend? Often historical data is limited, and trends are guessed at, or inferred on the basis of assuming that population group or country A will do tomorrow what group or country B is doing today.
- Can we really be confident that the underlying driving forces will persist? Do we have some idea, that is, of why there is a trend, and of whether the factors that give rise to it are stable or even self-reinforcing ones? Or are there reasons to expect these factors to change dramatically, exhausting or even reversing the trend? Will counter-trends come into play, for example as resistance grows to a particular cultural development, or competitors learn how to challenge the driving force behind a trend?
- At what point will ceilings or turning points be reached? One of the main challenges in forecasting the diffusion of technologies or practices is trying to estimate what the "ceiling" might be, for example, what the level will be at which the market is saturated with this new product. It is easy to be caught out here? for example, it may be assumed that the ceiling will lie at one TV set or car per household? but of course many households now have more than one of these products (while some will never have one).
- Is the quantitative trend masking qualitative changes? Often we talk about the development of a trend as if the thing that is developing or diffusing remains the same. But this is not necessarily the case? new technologies do not only diffuse, for example, they also change? the computers that are continuing to diffuse into the population today are very different from the first microcomputers of the 1970s, for example, let alone the mainframe computers of the 1950s! Similar changes may be involved in cultural practices, even in diseases: and one consequence is that the implications of later adoption of the new product or practice are liable to be very different from those of the early adoption. The skills required, the cultural meaning the utility of the new thing these are all liable to have changed.

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