

# Crystal Ball Software and Risk Analysis Tips

## (#16) Alternate Distributions

Crystal Ball users occasionally ask us whether Crystal Ball supports a specific distribution that is not listed in our Distribution Gallery. In many cases, the answer is "yes", because these distributions are merely variants of our existing distributions.

The **Rayleigh** distribution, for example, is the same as the Weibull, but with the Alpha parameter = 2. Examples of how the Rayleigh distribution is applied include measuring the reliability for the wear out of electronic parts and in mathematical physics, particularly communication theory.

Several other requested distributions are:

**ERF**            The Normal distribution with mean = 0 and variance =  $1/2h^2$ .

**CHI SQUARE**    The Chi-Squared distribution is a special case of the Gamma distribution with Alpha (Scale) = 2 and Beta (Shape) =  $2*Nu$ , where Nu is defined as the degrees of freedom. Used for goodness of fit comparison tests, various tests for significance, and tests of the independence of two variables.

**ERLANG**        Gamma distribution where shape is equal to a whole number.

For more information or to contact us, browse to <http://helpdesk.crystalball.com>

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