



Explanation of EQF

Quantifying IT forecast quality
by J.L. Eveleens and C. Verhoef

<http://www.cs.vu.nl/equity/>

Introduction

- EQF stands for Estimating Quality Factor.
- The EQF is conceived by Tom DeMarco in his book 'Controlling software projects'.
- The EQF is a measure of the deviation of a forecast to the actual.
 - It allows us to quantify the quality of forecasts.

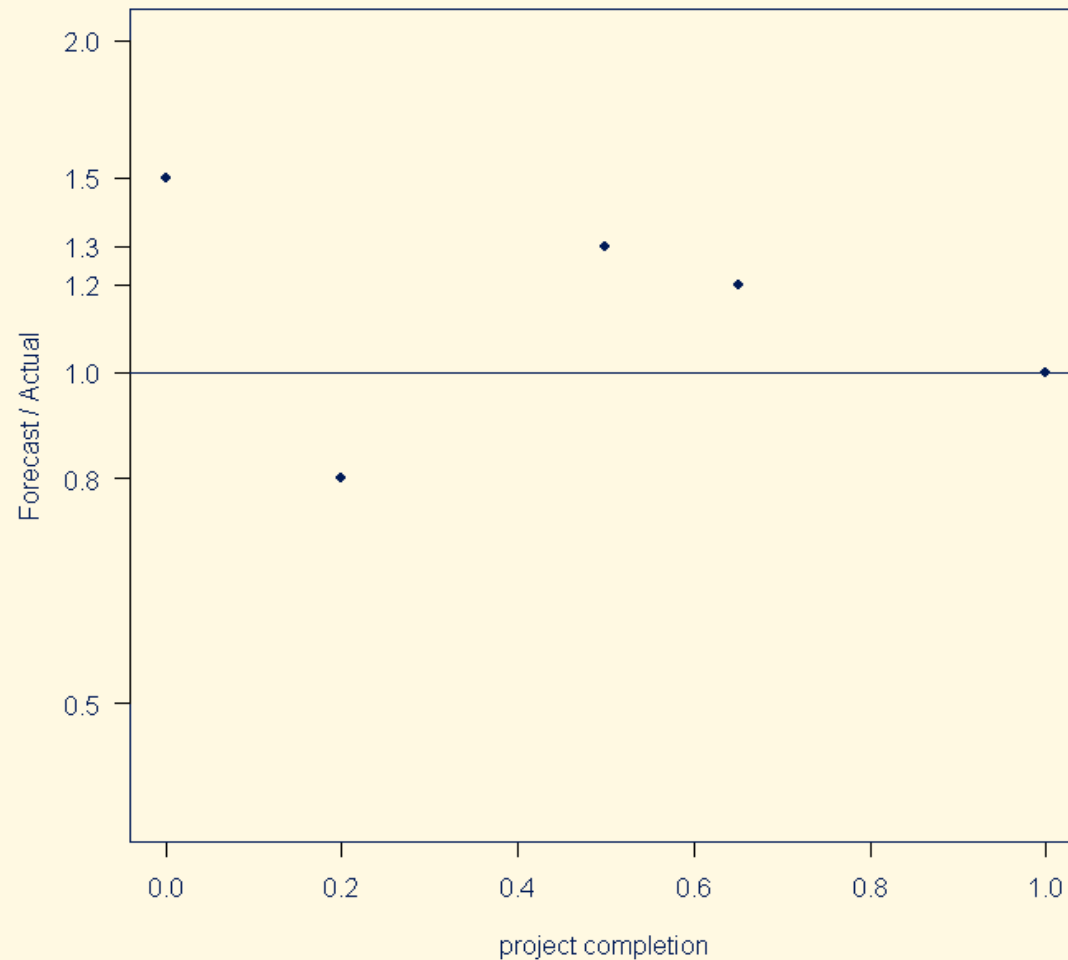
Example forecasts

- Suppose a project started 1/1/2008 and ended 1/9/2008. The project costs were 20 million euro.
- During the project the following forecasts were made:

Forecasted costs (millions)	Date of forecast	Project progression	f/a ratio
30	1/1/2008	0	1.5 (=30/20)
16	19/2/2008	$0.2 \left(= \frac{(19/2 - 1/1)}{(1/9 - 1/1)} \right)$	0.8
26	2/5/2008	0.5	1.3
24	8/6/2008	0.65	1.2

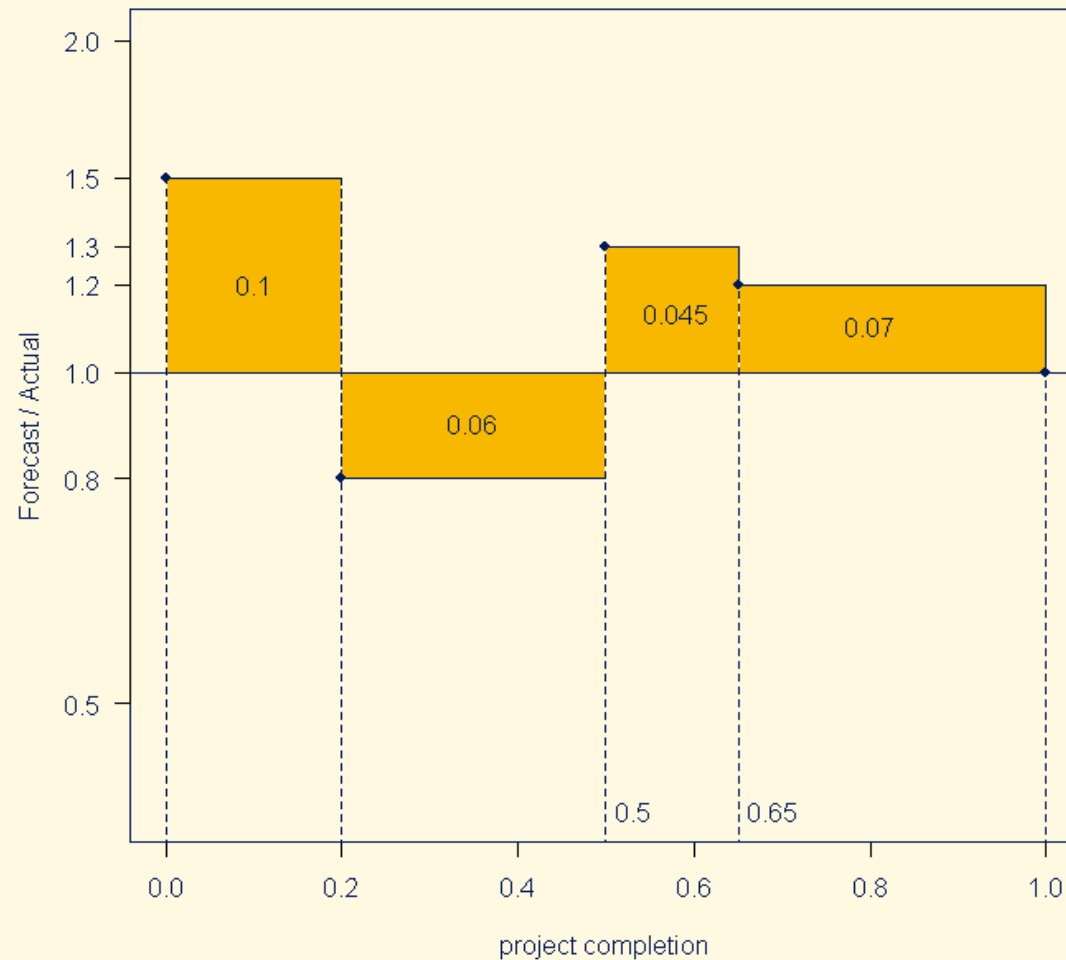
- What is the quality of these forecasts?

Example forecasts



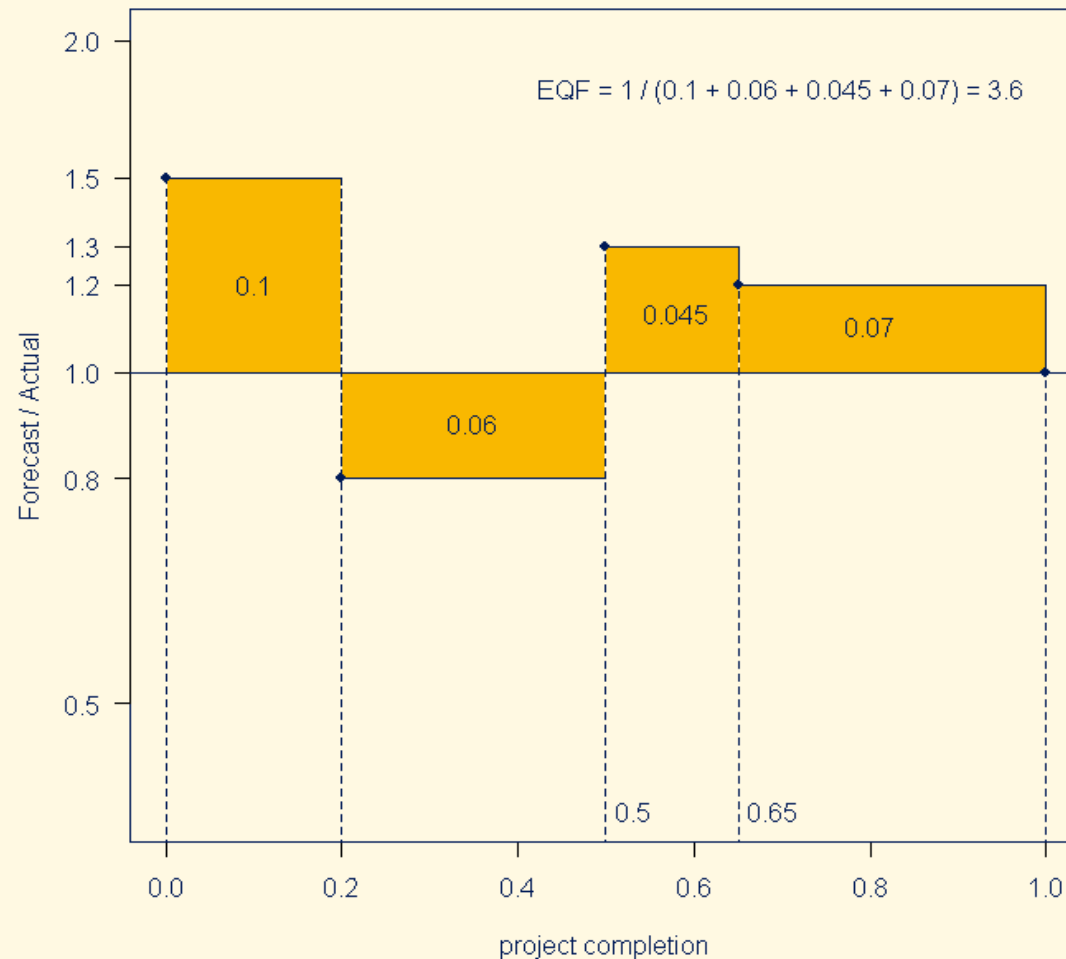
To explain the EQF we first plot our forecasts in an f/a plot.

Example forecasts



For each forecast we calculate the deviation to the actual by computing the surfaces between forecast and actual.

Example forecasts



The EQF is one divided by the sum of these surfaces.

For our example project the quality of the forecasts in terms of EQF is 3.6.

Estimating Quality Factor

- For each project it is possible to compute an EQF value in this way.
 - A low EQF value means the forecasts are of low quality.
That is, the deviation of the forecast to the actual is large.
 - A high EQF value means the forecasts are of high quality.
That is, the deviation of the forecast to the actual is small.
- With the EQF it is possible to compare the forecasts of projects with each other.