



## QUANTITATIVE METHODS IN PROJECT MANAGEMENT

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### ERRATA SHEET

#### **Chapter 2**

Pg 64

The equation at the top of the page has an incorrect summation in the last factor. The summation should be a product, as in this corrected equation:

$$\text{VAR}(X + Y) = \text{VAR}(X) + \text{VAR}(Y) + 2 * \rho(\sigma X * \sigma Y)$$

#### **Chapter 3**

Pg 87:

The second and third formulas are shown with an incorrect factor of  $(D_i + O)$  in the calculation for variance and standard deviation. The factor should be  $(D_i + M_i * O)$  in both formulas.

Pg 88, 90, 91:

Table 3-4, 3-5, 3-6, Confidence Calculations. The confidence figure given for 68% is actually the confidence for 84% representing the confidence of mean + 1 standard deviation,  $\sigma$ . See Figure 2-7 on pg 60 for a visual presentation. Explanation: In a Normal distribution, the confidence interval from the “mean to 1.0  $\sigma$ ”,  $\mu + \sigma$ , is ~34%. The interval from  $-\sigma$  to  $+\sigma$  around the mean is therefore twice 34% or 68%. The confidence interval for everything less than the mean,  $\mu$ , is 50% since the distribution is exactly symmetrical. In Table 3-4, the interval of interest is everything equal-to-or-less-than  $\mu + \sigma$ , so we sum the intervals of 50% and 34% to get 84%.

#### **Chapter 5**

Pg 138

Following the formula for present value, the word ‘compounded’ is better stated as ‘discounted’: “...where N is the number of periods to be discounted”

Pg 142

Clarification: the formula for CCE is a one period formula. If the project lasts more than one period, then the formula needs to be applied in each period as shown in the subsequent examples on pgs 144 and 145.

Page 1 of 2

The formula at the bottom of the page is incorrectly stated. The correct formula is  $EVA = EAT - CCE$

## Chapter 9

Pg 250:

Case 2: The ROC is incorrectly stated in the text by having a divisor of \$80 instead of \$95. The correct equation is written as follows:

$$ROC = (108 - 95)/95 = 13.7\%$$

Case 3. The “>” is reversed in direction in the text. The correct sentence with equation is:

$$\text{Contractor payable (000)} = (\$85 - \$105)*0.2 + \$105 + \$15 = \$116 > \$110$$

Pg 253:

Case 1: The contractor payment is miscalculated in the text. The correct sum is \$101. The correct equation is:

$$\text{Contractor paid (\$000)} = \$90 + (\$100 - \$90)*0.3 + \$8 = \$101$$

Consequently, the ROC is also miscalculated for Case 1. The correct ROC is:  
 $\$11/90 = 12.2\%$

Case 2: The contractor payment is miscalculated in the text. The correct sum is \$115. The correct equation is:

$$\text{Contractor paid (\$000)} = \$110 + (\$100 - \$110)*0.3 + \$8 = \$115$$

Consequently, the ROC is also miscalculated for Case 2. The correct ROC is:  
 $5/110 = 4.5\%$

In the text beginning with the paragraph.... “Now compare the two CP examples....”, the bullet points have incorrect numbers. The corrected text is:

- *Case 1*... “the CPIF the project paid \$101.”
- *Case 2*... “the CPIF the project paid \$115.”
- *Case 3*... “the risk range is from \$101 to \$115, a range of a lesser figure of \$14...  
Risk improvement range =  $(20 - 14)/20 = 30\%$ ”

Pg 254

Figure 9-2

On the vertical axis of Figure 9-2, the numbers \$113.7 and \$101.3 are incorrect. The correct numbers are \$115 and \$101 respectively.