P. Sandborn, Cost Analysis of Electronic Systems, World Scientific, Singapore, 2013.

Errata

Page 28 Equation (2.7) should be,
$$N_u = \left| \frac{\pi (0.5D_W - E)^2}{(S + K)^2} e^{-\left[\frac{S + K}{0.5D_W - E}\right]} \right|$$

The "L" appearing in the equation in the book does in fact appear in the original reference [2.2], however, in the original reference it is meant to indicate a "floor" function, not the variable L.

Page 320 The definition of i after (16.13) should be just "the year", not "the years until refresh"

Page 320 After (16.15), in the data for the example case shown in Fig. 16.6 $Y_R = 20$ should be omitted. The solution is a function of Y_R .

Clarifications and Comments

Page 10 The discount rate (*r*) used throughout the book is the Weighted Average Cost of Capital (WACC). Discount rate (*r*) appears in Chapters 1, 12, 13, 16, 17, and 20.

Page 79 Note that the ABC total for Product B in Table 5.4 is actually \$119.474 (all the Table 5.4 numbers are rounded to the nearest dollar). Therefore (in the second line from the bottom of the page) the total ABC expenditure for both products is: (100)(\$265)+(950)(\$119.474) = \$140,000, which is exactly the same as the total expenditure using the TCA approach.

Page 111 Equations (7.14) and (7.15) were previously derived in Section 3.2.1.

Page 179 The confidence levels in Table 9.1 are "two-sided confidence intervals".

Page 187 The "confidence" stated in Problem 9.6 is a "two-sided confidence interval".

Page 242 The z that appears in (12.14) is a single-sided z-score (the z that appears in (9.12) is two-sided).

Page 294 m is used in (15.21) and associated discussion to represent the number of backorders. This usage of m does not appear in the Notation Appendix for Chapter 15. m is also used in this Chapter to represent the renewal density function.

Pages 312-315 The use of a normal distribution for representing demand is in general inappropriate since the normal distribution includes values of demand that are less than 0. The analysis can be done with any distribution and a distribution which cannot have values below 0 would be more appropriate for the example chosen.

Page 321 A distinction should be made between Y_R and the Y_R that minimizes life-cycle cost. The horizontal axis in Fig. 16.6 is Y_R ; the Y_R appearing in (16.17) and the text after (16.17) is the Y_R that minimizes life-cycle cost.

Page 321 Equation (16.17) is only applicable when r > 0 (non-zero discount rate) and $rC_{CRo} \ge P_0Q$. For cases where r = 0 or $rC_{CRo} < P_0Q$ the optimum refresh date is at $Y_R = 0$.

Page 335 In Table 17.2, \$130,000 is per person.