Errata and comments for the book: "Introduction to Distribution Logistics"

TYPOS

Page 4, line 8. "A wide spectrum or topics should read "a wide spectrum of topics.

Page 7, last line. "much more retail stores should read "many more retail stores.

Page 9, last line. "is key factor should read "is a key factor.

Page 14, footnote of Figure 1.4. "semivariable should read "semi-variable.

Page 15, line 1 "interested in figuring the best solution should read "interested in figuring out the best solution.

Page 17, line -13 "customer are asked should read "customers are asked.

Page 20, line 3 "units/daym should read "units/day.

Page 31, line -5 "left hand side of table 1.1 should read "table 1.2.

Page 41, line -2 "forecasting demand an planning inventory should read "forecasting demand and planning inventory.

Page 95, line -19 "coefficientof variation should read "coefficient of variation.

Page 95, line -13 "in specific color should read "in a specific color.

Page 96, line 3 "were should read "we are.

Page 96, line -19 "forecasting and planning process should read "forecasting and planning process..

Page 103, last line "some notation: should read "some notations:.

Page 105, caption of table 3.3 "Mean Error a metric for bias should read "Mean Error: a metric for bias.

Page 108, last line "$0.5(33.33\% \times 2$ should read "$0.5 = (33.33\% \times 2$.

Page 110, last line of table 3.9, MAPE column "18 should read "18.

Page 154 The symbol ∎ should be moved from line 26 to line 7.

Page 155, first line section 3.9.3 "it need to be should read "it needs to be.

Page 190, line 18 "The production of machineries industry should read "The machineries industry.

Page 233, first line "distribution system do not enjoy should read "distribution system does not enjoy.

Page 237, line 3 "customer just walk away should read "customers just walk away.

Page 237, line -5 "this classification tell us should read "this classification tells us.

Page 239, line 17 "the product he/she was looking should read "the product he/she was looking for.

Page 239, note 3, line 3 "first select the products and then select a retailer that carries it should read "first select the products and then select a retailer that carries them..

Page 245, line 19 "problems adds should read "problems add.

Page 246, note 7, lines 4, 6, 8 "so the newsvendor might should read "so the newsvendors, "often newsvendor run out should read "often newsvendors run out, "neither hypothesis should read "neither hypotheses.

Page 261, line 1 "that could be otherwise be employed should read "that could otherwise be employed

Page 373, lines 7 and 8 "an homogeneous should read "a homogeneous, "and use should be "and uses, and "thus share should be "thus shares.

ERRORS

Page 152, line -4 "a standard deviation of 37.98 should read " a standard deviation of 10.005.

Page 85, line -2 $f(x)$ into the sum of linear terms, depending on auxiliary variables, say y_1, y_2, and y_3 if the function consists of three pieces:

$$
\begin{aligned}
& f(x) = c_1 y_1 + c_2 y_2 + c_3 y_3, \\
& x = y_1 + y_2 + y_3, \\
& 0 \leq y_1 \leq x^{(1)}, \\
& 0 \leq y_2 \leq \left(x^{(2)} - x^{(1)} \right), \\
& 0 \leq y_3 \leq \left(x^{(3)} - x^{(2)} \right).
\end{aligned}
$$

In practice, each variable y_i is associated with an interval, and the original variable is expressed as the sum of auxiliary variables. In order for this approximation to work properly, auxiliary variables should be "activated" in the correct order. First we use y_1, and we should activate further variables only if $x > x^{(1)}$; in other words, each "subinterval" must be saturated before using the next one. But since in the convex case we have $c_1 < c_2$, y_2 will be positive in the optimal solution only if y_1 reaches its upper bound $x^{(1)}$. We will not use y_2 in place of y_1, unless strictly necessary, because y_2 is more expensive to use. By the same token, y_3 is activated only if both y_1 and y_2 reach their upper bounds.

Should read

$f(x)$ into the sum of linear terms, depending on auxiliary variables, say z_1, z_2, and z_3 if the function consists of three pieces:

$$
\begin{aligned}
& f(x) = c_1 z_1 + c_2 z_2 + c_3 z_3, \\
& x = z_1 + z_2 + z_3, \\
& 0 \leq z_1 \leq x^{(1)}, \\
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Page 157, line -4

$$
S_{j,s} = \frac{\sum_{k=0}^{l/s-1} \frac{Y_{j+ks}}{(B_0 + (j+ks)T_0)}}{l/s - 1} \qquad 1, ..., s. \tag{0.1}
$$

Should read

$$S_{j,s} = \frac{\sum_{k=0}^{l/s-1} \frac{Y_{j+ks}}{(B_0 + (j+ks)T_0)}}{l/s} \qquad 1, ..., s. \tag{0.2}$$

Page 160, fourth equation

$$\text{See}_b \equiv \sqrt{\text{E}\left[(\beta - b)^2\right]} = \sigma_\epsilon \frac{1}{\sum_{i=1}^{n} (x_i - \overline{x})^2}.$$

Should read

$$\text{See}_b \equiv \sqrt{\text{E}\left[(\beta - b)^2\right]} = \sigma_\epsilon \sqrt{\frac{1}{\sum_{i=1}^{n} (x_i - \overline{x})^2}}.$$

$$SL_{II} = \frac{\sum_{x=0}^{N} x \cdot f(x) + \sum_{x=N+1}^{+\infty} N \cdot f(x)}{\sum_{x=0}^{N} x \cdot f(x)}, \tag{0.3}$$

Should be

$$SL_{II} = \frac{\sum_{x=0}^{N} x \cdot f(x) + \sum_{x=N+1}^{+\infty} N \cdot f(x)}{\sum_{x=0}^{+\infty} x \cdot f(x)}, \tag{0.4}$$

Page 349, item 4 in the list

Find $Q_i = F^{-1}_{d_{i,LT_1+\tau}} \left(\frac{E(d_i) - \lambda \cdot r_i}{E(d_i) + c_i} \right)$.

Should read

Find $Q_i = F^{-1}_{d_{i,LT_1+\tau}} \left(\frac{m_i - \lambda \cdot r_i}{m_i + c_i} \right)$.

Page 350, line 4 $E(d_i)$ should read m_i

Page 357, first equation

$$0.3 \int_{-\infty}^{+\infty} f_{N(200,\sqrt{2}220)}(x) \left[(x-200)^2 - 2 \cdot 70 \cdot (x-200) + 70^2 \right]^2 \, dx$$

Should read

$$0.3 \int_{-\infty}^{+\infty} f_{N(200,\sqrt{2}220)}(x) \left[(x-200)^2 - 2 \cdot 70 \cdot (x-200) + 70^2 \right] \, dx$$

Page 374, last equation

$$Q^* \frac{p-c}{p} \cdot (2 - 2p).$$

Should read

$$Q^* = \frac{p - c}{p} \cdot (2 - 2p).$$

Page 416, Table 8.2

r_{ij}	1	2	3	4	5	6	7
1	–	4	1	3	1	4	7
2		–	1	1	1	4	4
3			–	4	6	2	1
4				–	3	1	2
5					–	3	1
6						–	6
7							–

Should read

r_{ij}	1	2	3	4	5	6	7
1	–	4	1	3	1	4	7
2		–	1	1	1	4	4
3			–	4	6	3	1
4				–	3	1	2
5					–	3	1
6						–	6
7							–