

## EXERCISE 6 - E-Book

# E-Book.com Seven-Year Projected Financial Statement

**Problem:** You were recently certified at the Expert level in Excel by the Microsoft Office User Specialist program. Following certification, you were promoted to spreadsheet specialist at E-Book.com, an e-commerce Web site on the Internet that sells books, videos, and CDs. Your manager has asked you to create a worksheet that will project the revenue, expenses, taxes, and income for the next seven years based on the assumptions in Table 3-8. The desired worksheet is shown in Figure 3-84.

**Table 3-8 Data for Assumptions**

ASSUMPTIONS	
Units Sold in Year 2007	8,492,016
Unit Cost	9.27
Annual Sales Growth	7.00%
Annual Price Decrease	5.00%
Margin	40.00%

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	<b>E-Book.com</b>													
2	<b>Seven-Year Projected Financial Statement</b>													
3		2008	2009	2010	2011	2012	2013	2014						
4	Revenue	131,201,647	133,366,474	135,567,021	137,803,877	140,077,641	142,388,922	144,738,339						
5	Cost of Goods Sold	78,720,988	80,019,885	81,340,213	82,682,326	84,046,585	85,433,353	86,843,004						
6	Gross Margin	52,480,659	53,346,590	54,226,808	55,121,551	56,031,056	56,955,569	57,895,336						
7	<b>Expenses</b>													
8	Advertising	19,681,247	20,005,971	20,336,053	20,671,582	21,012,646	21,359,338	21,711,751						
9	Rent	1,800,000	1,980,000	2,178,000	2,395,800	2,635,380	2,898,918	3,188,810						
10	Salaries	23,616,296	24,005,965	24,402,064	24,804,698	25,213,975	25,630,006	26,052,901						
11	Supplies	1,968,025	2,000,497	2,033,505	2,067,058	2,101,165	2,135,834	2,171,075						
12	Maintenance	2,100,000	5,450,000	3,900,000	5,350,000	2,750,000	2,950,000	3,100,000						
13	<b>Total Expenses</b>	<b>49,165,568</b>	<b>53,442,434</b>	<b>52,849,622</b>	<b>55,289,138</b>	<b>53,713,166</b>	<b>54,974,096</b>	<b>56,224,537</b>						
14														
15	<b>Income Before Tax</b>	<b>3,315,091</b>	<b>(95,844)</b>	<b>1,377,186</b>	<b>(167,587)</b>	<b>2,317,890</b>	<b>1,981,473</b>	<b>1,670,799</b>						
16	Income Taxes	1,326,036	0	550,874	0	927,156	792,589	668,320						
17	<b>Net Income</b>	<b>1,989,054</b>	<b>(95,844)</b>	<b>826,312</b>	<b>(167,587)</b>	<b>1,390,734</b>	<b>1,188,884</b>	<b>1,002,479</b>						
18														
19	<b>Assumption</b>													
20	Units Sold in Year 2007	8,492,016												
21	Unit Cost	9.27												
22	Annual Sales Growth	7.00%												
23	Annual Price Decrease	5.00%												
24	Margin	40.00%												

**FIGURE 3-84**

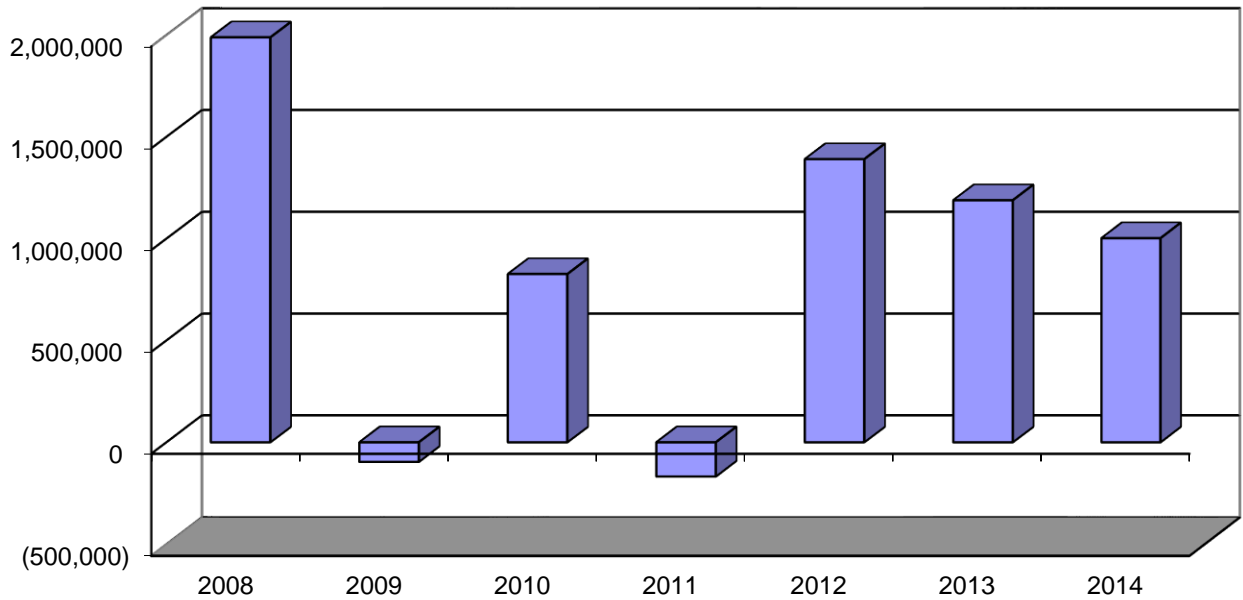
**Instruction Part 1:** Do the following to create the worksheet shown in Figure 3-84

1. Use the Select All button and Bold button to bold the entire worksheet. Enter the worksheet titles in cells A1 and A2. Enter the system date in cell H2 using the NOW function.
2. Enter the seven column titles 2008 through 2014 in the range B3:H3. Begin each year with an apostrophe so that the years are entered as text. Text headings are required for the charting in Part 2. Center and italicize cell B3. Rotate its contents 45°. Use the Format Painter button to copy the format assigned to cell B3 to the range C3:H3.
3. Enter the row titles in the range A4:A24. Change the font size in cells A7, A13, A15, and A17 to 12 point. Change the font size in cell A19 to 14 point and underline the characters in the cell. Add a heavy bottom border to the range A3:H3.
4. Enter the assumptions values in Table 3-8 in the range B20:B24. Use format symbols.
5. Assign the Comma style format with no decimal places to the range B4:H17.
6. Complete the following entries:
  - a. 2008 Revenue (cell B4) = Units Sold 2007 \* (Unit Cost / (1 – Margin)) or  
 $=B20 * (B21 / (1 - B24))$
  - b. 2009 Revenue (cell C4) = 2008 Revenue \* (1 + Annual Sales Growth) \* (1 - Annual Price Decrease) or  $=B4 * (1 + \$B\$22) * (1 - \$B\$23)$
  - c. Copy cell C4 to the range D4:H4.
  - d. 2008 Cost of Goods Sold (cell B5) = 2008 Revenue \* (1 – Margin) or  $=B4 * (1 - \$B\$24)$
  - e. Copy cell B5 to the range C5:H5.
  - f. 2008 Gross Margin (cell B6) = 2008 Revenue – 2008 Cost of Goods Sold or  $=B4 - B5$
  - g. Copy cell B6 to the range C6:H6.
  - h. 2008 Advertising (cell B8) = 1000 + 15% \* 2008 Revenue or  $=1000 + 15% * B4$
  - i. Copy cell B8 to the range C8:H8.

- j. 2008 Rent (cell B9) = 1,800,000
  - k. 2009 Rent (cell C9) = 2008 Rent + 10% \* 2008 Rent or =B9 + (10% \* B9)
  - l. Copy cell C9 to the range D9:H9.
  - m. 2008 Salaries (cell B10) = 18% \* 2008 Revenue or =18% \* B4
  - n. Copy cell B10 to the range C10:H10.
  - o. 2008 Supplies (cell B11) = 1.5% \* 2008 Revenue or =1.5% \* B4
  - p. Copy cell B11 to the range C11:H11.
  - q. Maintenance: 2008 = 2,100,000; 2009 = 5,450,000; 2010 = 3,900,000; 2011 = 5,350,000; 2012 = 2,750,000; 2013 = 2,950,000; 2014 = 3,100,000
  - r. 2008 Total Expenses (cell B13) = SUM(B8:B12)
  - s. Copy cell B13 to the range C13:H13.
  - t. 2008 Income Before Taxes (cell B15) = 2008 Gross Margin – 2008 Total Expenses or =B6 – B13
  - u. Copy cell B15 to the range C15:H15.
  - v. 2008 Income Taxes (cell B16): if 2008 Income Before Taxes is less than zero, then 2008 Income Taxes equal zero; otherwise 2008 Income Taxes equal to 40% \* 2008 Income Before Taxes or =IF(B15 < 0, 0, 40% \* B15)
  - w. Copy cell B16 to the range C16:H16.
  - x. 2008 Net Income (cell B17) = 2008 Income Before Taxes – 2008 Income Taxes or =B15 – B16
  - y. Copy cell B17 to the range C17:H17.
7. Change the font in cell A1 to 26-point Book Antiqua (or a similar font). Change the font in cell A2 to 16-point Book Antiqua (or a similar font). Change the font in cell H2 to 10-point Century Gothic (or a similar font). Change the background and font colors as shown in Figure 3-84.
8. Save the workbook using the file name, e-book.

**Instruction Part 2:** Draw a 3-D Column chart (Figure 3-85) that compares the projected net incomes for the years 2008 through 2014. Use the nonadjacent ranges B3:H3 and B17:H17. Add the chart title and format it as shown in the Figure 3-85. Rename and rearrange the sheets as shown in Figure 3-85. Save the workbook using the same file name (e-book) as defined in Part 1.

# Projected Net Income



**FIGURE 3-85**

**Instruction Part 3:** If the 3-D Column chart is on the screen, click the Seven-Year Plan tab to display the worksheet. Divide the window into two panes by dragging the horizontal split bar between rows 6 and 7. Use the scroll bars to display both the top and bottom of the worksheet.

Using the numbers in columns 2 and 3 of Table 3-9, analyze the effect of changing the annual sales growth (cell B22) and annual price decrease (cell B23) on the annual net incomes in row 17. The resulting answers are in column 4 of Table 3-9.

<b>Table 3-9 Data to Analyze and Results</b>			
<i>CASE</i>	<i>ANNUAL SALES GROWTH</i>	<i>ANNUAL PRICE DECREASE</i>	<i>2014 RESULTING NET INCOME</i>
<b>1</b>	<b>12.25%</b>	<b>2.15%</b>	<b>\$3,828,262</b>
<b>2</b>	<b>15.25%</b>	<b>-5.50%</b>	<b>\$10,215,981</b>
<b>3</b>	<b>25.50%</b>	<b>9.35%</b>	<b>\$5,613,019</b>

Use the Goal Seek command to determine a margin (cell B24) that would result in a net income in 2014 of \$5,000,000 (cell H17). You should end up with a margin of 43.94% in cell B24. Do not save the workbook with the latest changes.