Pro Forma Financial Statements

INTRODUCTION

Pro forma financial statements are an essential part of the strategic planning and annual budgeting processes. The phrase “pro forma” literally means “as a matter of form.” In essence, pro forma financial statements are the forms used to project the financial impact of management’s plans.

The previous document, Cash Flow Statement and Cash Budgeting, included pro forma financial statements for one quarter based on a detailed cash budget. This document focuses on preparation of pro forma financial statements for an extended period, normally at least three to five years, as part of the strategic planning process.

This document will discuss the purpose of pro forma financial statements. It will then illustrate how to prepare pro forma statements. Finally, it will identify some of the limitations involved in preparing and using pro forma statements.

PURPOSE OF PRO FORMA FINANCIAL STATEMENTS

Pro forma financial statements show the financial impact of achieving management’s forecasted level of sales and the projected costs associated with achieving those sales. Quantifying the impact of those projections enables management, the board of directors, and current and prospective shareholders and lenders to:

1. Assess whether the strategic and operational plans reflected in the projected sales and costs will achieve the desired financial results in terms of profitability, liquidity, and solvency. This assessment is aided by performing a ratio analysis based on the pro forma statements.

2. Determine whether equity and/or debt financing will be required to purchase capital assets and/or to fund larger scale operating requirements, and to determine whether the entity will be able to make the associated dividend payments and loan repayments.

Pro forma financial statements prepared as part of the strategic planning process represent the culmination of the prior separate quantitative analysis performed to evaluate each strategic option under consideration. Pro forma statements incorporate all aspects of the recommended strategy, enabling management and the board of directors to assess the overall impact of the proposed strategy.

PREPARING PRO FORMA FINANCIAL STATEMENTS

General Principles

The forecast amounts included in pro forma financial statements can be determined using several different methods. Management may specify a target goal. Past trends may be extrapolated to the future. Past trends may be adjusted for anticipated changes in economic conditions, technology, industry demand and supply, etc. Amounts may be taken from cash or capital budgets. Finally, some amounts may merely be “plugs,” as is the case when the amount of debt or equity financing is determined by the amount required to bring the balance sheet into balance.

Preparation of pro forma financial statements begins with preparation of a pro forma income statement. Once the income statement projections are complete, a pro forma balance sheet may be prepared, in which case the cash flow statement becomes a by-product of the income statement and balance sheet. Alternatively, preparation of the income statement may be followed by development of a cash flow statement, and the balance sheet may be prepared last. A hybrid approach may also be used where some balance sheet and cash flow statement items are developed simultaneously.

Illustration – Health Wise Inc.

The steps required to prepare pro forma financial statements will be explained with the aid of, and illustrated by, an example based on a fictitious company, Health Wise Inc.

Health Wise Inc. manufactures a wide range of home health aids, including thermometers, scales, blood-pressure monitors, blood glucose meters, safety aids, and mobility devices. It is a private company owned by a group of twenty shareholders. The shareholders are concerned about slowing growth trends. They are willing to invest an additional $200,000 in equity and to authorize an additional $2,000,000 in long-term debt provided that the company can be positioned for significant future growth in sales, profits, and dividends.

As a result of a strategic planning process, management has recommended to the board of directors that Health Wise simultaneously pursue two different strategic options. The first strategy is to develop a line of digital and electronic products, such as digital scales and monitoring devices and electric scooters. The second strategy is to license some of its existing products to companies operating in foreign nations.

The actual 2006 financial statements for Health Wise are provided in Appendix A, along with pro forma statements for 2007 through 2009. Although a five-year period is often desirable for pro forma statements, a three-year period is sufficient for illustrative purposes.

A detailed audit trail for the pro forma statements is provided in Appendix B. Designed to help the board of directors of Health Wise to assess the reasonableness of the projected statements, Appendix B will also provide readers of this document with more detailed explanations of the projections that follow. This will enable the focus of this document to remain on the overall approach to developing pro forma statements. (All references to Note numbers in the subsequent sections are to Appendix B.)

Pro Forma Income Statement

<u>Sales Revenue</u>

The pro forma income statement begins with sales projections.

In the case of Health Wise Inc., the sales projections detailed in Notes 1, 3, and 5 are based on an analysis of industry size and growth rates, analysis of the competition, discussions with salespeople, customer requests for more up-to-date products, and expressed interest from foreign companies in purchasing licences to sell Heath Wise products. The declining sales for traditional products reflect a small level of expected cannibalization as the digital and electronic product line is unveiled.

<u>Operating Expenses</u>

After estimating future sales revenues, the next step is to forecast various operating expenses.

As a starting point, expenses that vary with sales are usually projected to remain at a constant percentage of sales. Adjustments may be made to this percentage based on changes in technology, suppliers, methods of doing business, etc., or if cost increases are expected to exceed price increases. For example, while marketing expenses may have typically been 15% of sales revenues, planned advertising campaigns and/or the significant expansion of the sales force may require an upward adjustment to this percentage.

For simplicity, any projections for Health Wise that are based on a percentage of sales or income use only the 2006 figures. A more accurate basis for projection may be obtained by using an average of the past two or three years or, at least, by adjusting for any unusual spending patterns in the past year.

As outlined in Notes 2 and 4, Health Wise anticipates that cost of goods sold as a percentage of sales will decrease as a result of economies of scale from adding a new product line, the ability to charge premium prices for more sophisticated product designs, and the increased use of more efficient manufacturing equipment.

Marketing expenses reflect both the reduced level of spending required for licensed products, which only require the support of salespeople, and the initial increased level of spending for the digital and electronic products. Advertising and promotion budgets for mature traditional products will also be shifted over to the electronic products. See Note 6 for detailed projections.

To reduce time-to-market, Health Wise plans to purchase several existing patented products and to hire five developers with experience in digital and electronic products. Thus, a large initial increase in research and development expense will be required, as reflected in Note 7. Increases in subsequent years will be smaller.

The increase in general and administrative costs (Note 8) reflects both increased utilization of the manufacturing facilities and the hiring of a Vice-President of Digital and Electronic Products in March 2007. Health Wise currently rents its office and manufacturing facilities and has sufficient excess capacity to accommodate the new product line.

Interest Expense

Interest expense can be difficult to predict since it depends on the amount of debt outstanding. In some instances, the amount of new borrowing (or repayment of debt) may be known. In other cases, the amount of debt financing may not be known until the forecasted balance sheet is complete since the required debt financing may be the balancing “plug” figure. In the latter case, the calculation of interest expense becomes an iterative process if available financing does not match the required financing and adjustments have to be made to expansion plans and/or spending levels.

In the case of Health Wise, management projects that it will be able to borrow $2,000,000, using a long-term loan, to partially finance the planned purchase of manufacturing equipment. The borrowing will take place at the beginning of the second quarter of 2007 (Note 9).

Amortization Expense

Amortization expense depends on existing capital assets and planned acquisitions or disposals. For simplicity, the straight-line method is often used to project amortization expense. If planned capital expenditures need to be changed to accommodate financing constraints, the calculation of amortization expense also becomes an iterative process.

Health Wise plans to purchase additional manufacturing equipment for $3 million (Note 10).

Income Tax Expense

Income tax expense is based on the anticipated combined federal and provincial tax rate.

Health Wise anticipates that the current rate of 35% will not change significantly in the next few years (Note 11).

Pro Forma Balance Sheet

Cash

The forecast value for cash and cash equivalents may be derived from the projected cash flow statement (as is done for Health Wise). Alternatively, management may set a target cash level that, in turn, will determine the required financing level.

Current Assets and Liabilities

For items that vary with sales, such as accounts receivable, inventory, and accounts payable, the pro forma amounts are typically projected to remain at the same percentage of sales as in the past. However, if management intends to rely more heavily on trade credit or if credit terms offered to new types of customers are expected to be substantially different than current credit terms, such projections should be adjusted. An alternate approach to using percentages of sales is to calculate year-end amounts for accounts receivable, inventory, and accounts payable based on revised assumptions for the average collection period, average days sales in inventory, and average payment period.

The percentage approach will be used to forecast accounts receivable, inventories, prepaid expenses, and accounts payable and accrued liabilities, for Health Wise. Since licensing revenues have no associated inventories, the projections for inventory are based on sales of traditional and new products (Notes 12, 13, 14, and 17).

For Health Wise, taxes payable will be based on a percentage of income before taxes (Note 18).

Net Capital Assets

Pro forma capital asset amounts are a function of existing capital asset amounts, planned acquisitions or disposals, and amortization expense on existing and planned purchases.

See Note 15 for details related to Health Wise’s net capital assets.

Financial Liabilities

The pro forma amounts for financial liabilities are ultimately determined by a combination of the need for financing, availability of financing, and the entity’s borrowing policy. Initially, financial liabilities may be calculated as the “plug” amount required to balance the balance sheet. If this “plug” amount exceeds the firm’s borrowing capacity, an iterative process is required to adjust the timing or magnitude of planned expansionary strategies and the corresponding planned expenditures so that required financing fits within the constraints of available financing. Alternatively, management may attempt to find additional sources of financing so that planned expenditures do not have to be adjusted.

Health Wise's operating loan balance is projected based on 2006 levels in relation to current assets excluding cash. The long-term loans amounts are based on estimates provided by management, and fall within available financing limits offered by the company's bank (Notes 16 and 19).

Equity

Pro forma shareholders' equity incorporates any planned share issues. Pro forma retained earnings are based on projected net income less dividends.

Refer to Notes 20 and 21 for details about Health Wise.

Cash Flow Statement

The amounts for net income and amortization expense are derived from the income statement.

The change in various current assets and liabilities depends on the projected ending balance sheet amounts, calculated using percentage-of-sales or ratio-based approaches as discussed in the preceding section.

The investing section of the cash flow statement is determined based on planned purchases or dispositions of capital assets.

The financing section is calculated based on planned borrowings, repayment terms, share issues, and dividends.

LIMITATIONS IN PREPARING AND USING PRO FORMA FINANCIAL STATEMENTS

Preparing pro forma financial statements is a complicated iterative process, particularly when it comes to projecting amounts for capital expenditures, debt and equity financing, and the associated amortization and interest expenses. As well, it is often necessary to recast the statements when profitability projections prove to be below desirable goals or when expansion options are too optimistic given available financing.

As is the case with any forecasts, it is a challenge to develop pro forma statements based on realistic projections, especially if the projected strategy moves the entity into diverse products, new geographic markets, and/or new ways of doing business such as licensing agreements, joint ventures, and acquisitions of other entities. Of course, the further into the future the projections are made, the more difficult it is to develop realistic estimates.

To help management assess the reasonableness and attainability of various numbers, a clear but concise audit trail is required. A good audit trail will also assist management with conducting sensitivity analysis to determine the impact of changes in various estimates on projected net income, cash from operations, financing requirements, etc.

REFERENCES:

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Lusztig, Peter, W. Sean Cleary, and Bernhard H. Schwab, 2001, Chapter 4, *Finance in a Canadian Setting,* Sixth Edition, John Wiley & Sons Canada, Ltd., Toronto, Ontario.

The Society of Management Accountants of Canada, 2002, *Management Accounting Practices 3200,* Budget and Pro Forma Financial Statements.

Appendix A
Pro Forma Financial Statements for Health Wise Inc.

Health Wise Inc.
Income Statements
For the years ended December 31
($000's)

	Actual	Pro forma		
	2006	2007	2008	2009
Sales revenues - traditional products (1)	$47,458	$46,509	$45,114	$43,760
Cost of goods sold - traditional products (2)	23,178	22,557	21,655	21,005
Gross profit - traditional products	24,280	23,952	23,459	22,755
Sales revenues - digital and electronic products (3)		7,000	14,000	18,200
COGS - digital and electronic products (4)		3,010	5,880	7,462
Gross profit - digital and electronic products		3,990	8,120	10,738
Sales revenues - licensed products (5)		4,000	4,600	5,290
Total sales revenues	$47,458	$57,509	$63,714	$67,250
Total cost of goods sold	23,178	25,567	27,535	28,467
Total gross profit	24,280	31,942	36,179	38,783
Expenses:				
Marketing (6)	8,653	11,214	11,468	11,096
Research and development (7)	9,987	13,482	15,505	16,280
General and administrative (8)	3,187	3,581	3,939	4,136
Interest (9)	84	189	200	173
Amortization (10)	223	723	723	723
Total expenses	22,134	29,189	31,835	32,409
Income before taxes	2,146	2,753	4,344	6,375
Income taxes - current (11)	751	963	1,520	2,231
Net income	$1,395	$1,789	$2,823	$4,144

Health Wise Inc.
Balance Sheets
As at December 31
($000's)

	Actual		Pro forma	
	2006	**2007**	**2008**	**2009**
Assets				
Current assets:				
Cash	$ 1,401	$ 1,589	$ 1,777	$ 2,304
Accounts receivable [12]	5,193	6,326	7,008	7,398
Inventories [13]	2,637	2,996	3,310	3,470
Prepaid expenses [14]	362	437	484	511
Total current assets	9,593	11,349	12,580	13,682
Net capital assets [15]	1,338	3,615	2,892	2,169
Total Assets	$10,931	$14,964	$15,472	$15,851
Liabilities & Shareholders' Equity				
Current liabilities:				
Operating loan [16]	$ 403	$ 488	$ 540	$ 569
Accounts payable & accrued liabilities [17]	4,080	4,946	5,479	5,784
Taxes payable [18]	14	18	28	41
Current portion of long-term loan [19]	111	511	511	511
Total current liabilities	4,608	5,963	6,559	6,905
Long-term loan [19]	1,244	2,733	2,222	1,711
Total liabilities	5,852	8,696	8,781	8,616
Shareholders' Equity				
Common shares [20]	400	600	600	600
Retained earnings	4,679	5,668	6,092	6,635
	5,079	6,268	6,692	7,235
Total Liabilities & Shareholders' Equity	$10,931	$14,964	$15,473	$15,851

Health Wise Inc.
Cash Flow Statements
For the year ended December 31
($000's)

	Actual	Pro forma		
	2006	**2007**	**2008**	**2009**
Cash provided/used by operations:				
Net income	$1,395	$1,789	$2,823	$4,144
Add back amortization (10)	223	723	723	723
Change in accounts receivable (12)	117	(1,133)	(683)	(389)
Change in inventories (13)	(77)	(359)	(314)	(159)
Change in prepaid expenses (14)	(71)	(75)	(47)	(27)
Change in accounts payable & accrued liabilities (17)	185	866	534	304
Change in taxes payable (18)	3	4	10	13
	1,775	1,814	3,047	4,609
Cash provided/used by investing:				
Purchase of equipment (15)	(144)	(3,000)	–	–
Cash provided/used by financing:				
Change in operating loan (16)	50	85	52	29
Change in long-term loan (19)	(111)	1,889	(511)	(511)
Issue of shares (20)	–	200	–	–
Payment of dividends (21)	(800)	(800)	(2,400)	(3,600)
	(861)	1,374	(2,859)	(4,082)
Change in cash	770	188	188	526
Cash balance, beginning of year	631	1,401	1,589	1,777
Cash balance end of year	$1,401	$1,589	$1,777	$2,304

Appendix B
Notes for Health Wise Inc. Pro Forma Financial Statements
(all dollar amounts are in 000's)

1. Sales of traditional products (TP) – decline 2%, 3% and 3% per year from 2006 due to some cannibalization from digital and electronic products (DEP).
2. TP cost of goods sold (COGS) – 2007: 48.5%; 2008 and 2009: 48%; slight improvement on 2006 (48.84%) due to economies of scale related to DEP.
3. Sales of DEP – 2007: $7 million based on 7 to 10 months' sales; 2008: 100% increase; 2009: 30% increase.
4. DEP COGS – 2007: 43%; 2008: 42%; 2009: 41%; reflects premium prices, economies of scale, increased use of more efficient manufacturing equipment.
5. Sales of licensed products (LP) – 2007: $4 million; 2008 and 2009: 15% increases.
6. Marketing expense – based roughly on 2006: 18.23% of sales; 2007: 19.5%; 2008: 18%; 2009: 16.5%; introduction of DEP initially requires higher marketing support but LP only require sales support.
7. Research and development expense – 2007: 35% increase due to DEP; 2008 and 2009: 15% and 5% increases.
8. General and administrative expense – 2007: 10% increase over 2006 for higher utilization of facilities plus $90,000 for new Vice-President of DEP for 10/12 of the year; 2008 and 2009: 10% and 5% increases.
9. Interest expense – 7% for operating loan (average balance); 5% for existing long-term loan with balance of $1,355 at end of 2006 and annual principal payments of $111 on Dec. 31; 6% for new long-term loan of $2,000 from Apr. 1, 2007, with annual principal payments of $400.
10. Amortization expense (straight-line method) – existing equipment with remaining 6-year life: $223; new equipment costing $3,000 with 6-year life: $500 (full-year amortization in year of purchase).
11. Income tax expense – 35% of income before taxes; Health Wise follows the taxes payable method of reporting net income.
12. Accounts receivable – 11% of sales based on 2006.
13. Inventories – 5.6% of TP and DEP sales based on 2006.
14. Prepaid expenses – 0.76% of sales based on 2006.
15. Net capital assets – 2006 balance of $1,338 plus purchase of $3,000 less combined amortization expense of $723 in each of year.
16. Operating loan – 5% of current assets excluding cash based on 2006.
17. Accounts payable & accrued liabilities – 8.6% of sales based on 2006.
18. Taxes payable – 0.65% of income before taxes based on 2006.

19. Long-term loan – see note 9; current portion reflects upcoming principal repayments of $111 and $400; remainder is long-term loan, with principal balances starting at $1,355 and $2,000.
20. Issue of $200,000 in additional common shares on March 1, 2007.
21. 2007: dividends held at 2006 level to preserve cash for expansion; 2008 and 2009: additional dividends reflect 50% increase in common shares, increased profitability, and shareholder preferences for higher dividends.

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