Fundamentals of corporate finance

Finance

I

a) For every 13 gallons, we need 8 quartz or 2 gallons of raspberries. Now, for 15 gallons we have, (15 x8)/13 = 9. 23 quarts or 2. 31 gallons of raspberries.

The total amount of raspberries including the ones discarded is 9. 23/. 8 = 11. 54 quarts and the total cost of the raspberries is 11. 54 x $0. 75 = $ 8. 66.

The total amount of other ingredients is 15-2. 31 = 12. 69 gallons and it costs 12. 69 x $ 0. 47 = $ 5. 96.

The total labor time for sorting is 3 x 9. 23 = 27. 69 minutes. The labor for sorting costs (27. 69/60) x $8 = $3. 69.

The labor for the blending will 13 minutes for 13 gallons, for 15 gallons it will take 15 minutes.

The cost of labor for blending is (15/60) x $8 = $2.

Adding all the expenses for the 15-gallon batch of raspberry sherbet, we have $8. 66 + 5. 96 + $3. 69 + $2 = $ 26. 54.

There are 60 quarts in 15 gallons so the total production cost of raspberry sherbet per quartz is $ 0. 44.

b) The Tastee Fruit Company will conduct a training seminar to minimize or better eradicate the unfavorable market price and labor efficiency variances. This training concerns thefinanceand human resource department.

The finance department should learn and understand the market price variances. They should formulate a budget with the current price trends. The budget should include the projected price of the goods to be bought. This is critical to make compensation for the variances. The finance department is responsible for the proper use of resources. They should project trends and changes to the resources. If there will be a shortage then the department should know about it and have prepared for it. Likewise, the department should know when do the prices will go down or will go up. They should not buy goods, which not on the budget.

They should monitor the other departments on how they follow the budget. In this way, the budget deficit will be minimized or much better. On the other hand, the human resource department should monitor the efficiency of the production by checking on the workers. The department should check how competent the employees are. The employees should be best for the job or at least qualified. They should propose a proper salary system for the employee's work. They should learn to listen to employee's complaints and tend to it as for the good the company and its employees.

There should be a proper production system and the human resource department should strictly implement it.

c) Teresa Adams had violated several ethical standards for management accountants. She violated the standard of integrity, specifically herresponsibilityto refrain from engaging in or supporting any activity that will discredit the profession when he arranges that Tastee Fruit to buy raspberries to his friend at the higher price (Smith, 2006). Her responsibility to give information fairly and objectively was broken when he gives the wrong information about the price of raspberries.

II a) The division managers submit their annual reports to the vice-presidents for annual budgeting. This is important because the division managers should know about the trends and issues in their region to ensure accurate forecasts. They are familiar with the customs of the regions and they could more accurately project the sales and income of the company. Then, a strategic research team would assess the submitted reports. They would integrate economic assessments of the region into the reports. They compile with the other reports. This is to double-check the reports and forecasts of the division managers.

This step is critical to check if the division had overlooked something in their region. The researchers are specialists so do the more technical part of the report. Then the district managers took care of the sales budget for their district. This is necessary since they are the ones doing the distribution. They got the information first hand. It is returned to the division manager for compilation and quick assessment. This quite necessary since they are the direct executive officer of the district managers. It is brought to the division controller and research team for review. It is made sure to follow the company objectives.

The reports of the divisions were reviewed by the top executive officials to prepare for the review for the vice-presidents and the CEO. These steps are important to ensure that they follow company standards. After the review, the budgets and plans for the next fiscal year are submitted to the board of directors for approval. The board of directors is the body that represents the owner of the company so the final say is theirs.

b) The responsibility-accounting system of River Beverages is quite tedious but it is effective since they follow a budget that the owners approved.

The plant managers are responsible for any cost or profit that the company incurs. They must meet the budget to ensure the company's growth. If they don't meet the budget the plant managers should cut production cost or identify inefficiencies in their plant. This will be easy for them because they run on a budget system.

c) River Beverages' management wants a report that will tackle regional differences among district levels. They want a budget plan that would follow the company’s objectives and at the same time cope up with the demands of the customers.

The budgeting system of River Beverage is thorough and accurate; it made the company looking to flourish in the future. It could tackle major problems in the company. But it had the plant managers under relatively tremendousstressto follow the approved budget. Moreover, the budgeting takes to much time so the trends should have changed by the time the budgets got approved. That would be a disadvantage to the lower managers since they have to work harder to compensate for the variance in the budget.

III

a) Sales Budget

Based on the additional information in the case, the projected sales by the end of December 20X0 are 400, 000 and it is being expected that the sales will increase by 15% the following month. To compute for the total sales for the months of the first quarter here is the formula: total sales from the previous month x [1+rate of increase].

To calculate the total sales of January 20X1 we have: 400, 000 x 1. 15 = 460, 000.

For the month of February: 460, 000 x 1. 15 = 529, 000.

For the month of March: 529, 000 x 1. 15 = 608, 305.

b) Cash Receipts Budget Computation of Cash Receipts of January:

Collected receipts from this month = 460, 000 x 0. 30 = 138, 000 + Collected receipts from credit this month = 460, 000 – 138, 000 = 322, 000 322, 000 x 0. 15 = 48, 300 + Collectibles from last month = 400, 000 x 0. 70 = 280, 000 280, 000 x 0. 85 = 238, 000

Total Cash receipts= 424, 300 Computation for the month of February: Collected receipts from this month = 529, 000 x 0. 30 = 158, 700 + Collected receipts from credit this month = 529, 000 – 158, 700 = 370, 300 370, 300 x 0. 15 = 55, 545 + Collectibles from last month = 460, 000 x 0. 70 = 322, 000 322, 000 x 0. 85 = 273, 700

Total Cash Receipts = 487, 945

c) Computation for the month of February:

Collected receipts from this month = 608, 350 x 0. 30 = 182, 505 + Collected receipts from credit this month = 608, 350 – 182, 505 = 425, 845 425, 845 x 0. 15 = 63, 876. 75 + Collectibles from last month = 529, 000 x 0. 70 = 370, 300 370, 300 x 0. 85 = 314, 755

Total Cash Receipts = 561, 136. 75

d) Purchases Budget The formula in computing the purchases budget is: Purchases Budget = Costs of goods sold + Budgeted Ending Inventory – Beginning Inventory. Moreover, it is stated in the case that in computing for the Budgeted Ending Inventory it is equal to half of the next month’s projected Cost of Goods Sold.

Based on the case, the cost of goods sold is 80% of sales. Therefore, we computer the costs of sales per month in this manner:

Cost of goods sold of January: 460, 000 x 0. 80 = 368, 000

Cost of goods sold of February: 529, 000 x 0. 80 = 423, 200

Cost of goods sold of March: 608, 350 x 0. 80 = 486, 680

Purchase Budget of January: 368, 000 + 211, 600 – 184, 000* = 395, 600

Purchase Budget of February: 423, 200 + 243, 340 – 211, 600 = 454, 940

Purchase Budget of March: 486, 680 + 279, 841** – 243, 340 = 523, 181

*Is equal to the ending inventory of December 20X0.

[368, 000 / 2 = 184, 000]

**Is computed through dividing into half the Cost of Goods Sold of April.

[608, 350 x 1. 15 = 699, 602 x 0. 80 = 559, 682 / 2 = 279, 841]

e) Cash Disbursement Since the costs of the Automated Inventory Handling System will be financed by the sum of the Cash and Marketable Securities [29, 000 + 15, 000 = 44, 000], therefore the cost of the system is 44, 000. The company has to maintain a minimum of cash balance 19, 000, consequently, the amount ofmoneythat can be used by Atlantico in buying the system is 25, 000 [44, 000 – 19, 000 = 25, 000].

To compute for the amount of money that will be borrowed to a bank would be:

44, 000 [costs of the system] – 25, 000 [money on hand that can be used in buying the system] = 19, 000

The company is determined to pay their obligation to the bank by the end of the first quarter. The interest of the bank is 15% is expressed annually; we have to determine first the interest rate on a quarterly basis. To do this, we just have to divide the annual interest rate to 4 and this gives us 3. 75%.

Thus, computing for the amount of payment of Atlantico to the bank would be:

19, 000 x 1. 0375 = 19, 712. 5 We just have to divide this into three months, we have:

19, 712. 5 / 3 = 6, 570. 83 per month With regards to other expenses of the company, just refer to the one stated by Garrity regarding the monthly expenses of Atlantico.

e/f) Cash Budget In order to compute for Cash Budget per month, we have to determine first the Change in the Cash Balance during the month by subtracting the Cash Receipts of the month to Cash Disbursements of the said month. We add the borrowed money from the bank to the change in Cash Balance and the total of which is to be deducted from the amount of the principal money [expressed per month] and to the interest [expressed per month].

The difference of these would be the Change in Cash Balance during the period. The last step in computing for the Cash Budget per month is by adding the Change in Cash Balance during the Period to the Beginning Cash Balance of the Period. The Beginning Cash Balance is just equal to the Cash Balance of the previous month.

f) Based on the given data above, we could clearly see that the company has really in need of a short term loan in order to finance their plan of purchasing the new equipment at the start of the year since most of the capitals of the company are receivables in nature.

g) Budgeted Income Statement [1st Quarter] In computing for the Budgeted Income Statement, just subtract all the expenses that were incurred by the company to the Total Sales Revenue of the first quarter. For the Total Sales Revenue just add all the Sales Revenues per month [refer to Sales Budget]. For the Total Costs of Goods Sold just add all the Costs of Goods Sold per month, [refer to Purchases Budget]. For the Total Cash Disbursement just add all the Cash Disbursement per month [refer to Cash Disbursement Budget].

h) Budgeted Statement of Retained Earnings

To compute for the Budgeted Statement of Retained Earnings we just have to subtract the Dividends Paid to the sum of the Beginning Retained Earnings, Net Income [refer to Budgeted Income Statement], and Total Investments.

i) Budgeted Balance Sheet

• Get the sum of the Current Assets and Long-Lived Assets

• Get the sum of the Current Liabilities, Long Term Liabilities, and Owners Equity

IV

I would advise Mr. Road to withdraw back his portfolio investments and put it into a more profitable financial market. 1 + real interest rate = [1 + nominal interest rate] / [1 + inflation rate] (Brealey, 2003) = 1. 09 / 1. 03 = 1. 058

Real Income = 180, 000 x 1. 058 = 199, 440 To compute for the amount of income that can be withdraw = 190, 440 – 180, 000 = 10, 440. To compute for the monthly spending that Mr. Road wanted if will live for the following 20 years:

FV = PV(1 + r)^t FV = 180, 000 (1+0. 09)^20 FV = 180, 000 (5. 604) = 1, 008, 720

Annual Spending of Mr. Road = 1, 008, 720 / 20 = 50, 436

Monthly Spending of Mr. Road = 50, 436 / 12 = 4, 203

References:

1. Brealey. (2003). Fundamentals of Corporate Finance (4th ed.): The McGraw-Hill. Smith, K. T. (2006).
2. Business and Accounting Ethics [Electronic Version], 3. Retrieved 10-01-07 from http://acct. tamu. edu/smith/ethics/ethics. htm.