

Budgeting Analysis

Incognito inc. would like to plan its activity for the next 6 months. It expects that its sales quantity will growth by 5% for the next 6 months due to the new market it has entered recently. Consequently, it wants to budget for production and all the required expenses to meet sales. Incognito will sell two of its key products i.e., product A and B and both products sales will grow at the same rate.

Sales and Production Budget

Starting at 3 million and 1.10 million in sales for A and B respectively in month 1, sales quantity of A and B will increase to 3.15M and 1.16M in month 2, 3.31M and 1.21M in month 3, 3.47 and 1.27 in month 4, 3.65M and 1.34M in month 5 and 3.83M and 1.40M in month 6. With a desired 1% ending finished good inventory quantity, the total required production needs are 4.14M, 4.31, 4.52, 4.75, 4.99 and 5.24 in each of the subsequent months. Of these quantities, A represent 73.2% and B the remaining 26.8%. Additionally, the firm expects to collect 90% in the month of sales, 5% in the following month and 5% two months later.

Raw Material, Direct Labor and Overhead, and Finished Goods Budget

The firm desires a 10% ending inventory for its row material; hence, product A which requires 1.5kg of raw material will need 5000 tones ($4.14 \times 73.2\% \times 1.5 \times (1+10\%)$) of RM and product B 0.61 tone. The firm will pay 80% of its RM in the month of purchase, 10% in the following month and 10% two months later. In addition, the firm plans 144h (equivalent of 18 working days) per worker for the next 3 months to meet the required production needs of product A, which will then increase to 150h for the remaining 3 months. Similarly, the company only expect 64h per worker for B. Also note that it takes 20 and 5 workers to make A and B respectively to meet the production needs. Hence, the total direct labor costs are estimated at \$44800 in month 1, 2 and 3 and \$48580 for the remaining 3 months. Finally, the overhead costs are \$0.07M for the next 6 months. The predetermined overhead rate is thus \$3000 per hour for both A and B. These calculations lead to the estimated unit FG cost of \$2.29 (of which \$2 of RM and \$0.29 of DL) and \$0.94 (of which \$0.70 of RM and \$0.24 of DL) for A and B in month 1, \$2.31 and \$0.7 in month 2, \$2.32 and \$0.8 for month 3 & 4, \$2.34 and \$0.9 for month 5 and \$2.36 and \$0.9 in month 6. These unit prices are then multiplied by the desired FG ending inventory discussed during the Sales budget.

Pro-forma Statements and Conclusions

Subsequently, we forecasted the pro-forma balance sheets, cashflows and income statements of Incognito inc. Our analysis suggests a net income of \$5.07M, \$5.97M, \$6.14M, \$6.23M, \$6.47M and \$6.73M for the next 6 years. Then, the cashflow statement suggests an ending cash balance of \$3.96M, \$6.44M, \$8.01M, \$8.12M, \$8.42M and \$8.75M. Finally, the total assets are \$6.52M, \$10.49M, \$12.21M, \$12.49M, \$12.95M and \$13.47M.

Profit & Loss budgeting		1	2	3	4	5	6
Contribution P&L							
Sales		28,4	29,82	31,311	32,88	34,52	36,25
- Commission		0,00	0,00	0,00	0,00	0,00	0,00
Net sales		28,40	29,82	31,31	32,88	34,52	36,25
Costs of good solds		11,57	11,04	11,55	12,21	12,76	13,33
Variables selling expenses		4,00	4,50	5,00	5,50	6,00	6,50
Variable administrative expenses		5,00	5,25	5,51	5,79	6,08	6,38
Contribution margin		7,83	9,03	9,25	9,38	9,69	10,04
Gross profit		16,83	18,78	19,76	20,67	21,76	22,92
Fixed selling costs		0,040	0,040	0,040	0,040	0,040	0,040
Fixed administrative costs		1,03	1,03	1,03	1,03	1,03	1,03
Net operating margin		6,76	7,96	8,19	8,31	8,62	8,97
- S&A expenses		10,07	10,82	11,58	12,35	13,14	13,95
Operating income		6,76	7,96	8,19	8,31	8,62	8,97
- Interest expenses							
Income before tax		6,76	7,96	8,19	8,31	8,62	8,97
- income tax @ 25%		-1,69	-1,99	-2,05	-2,08	-2,16	-2,24
Net income		5,07	5,97	6,14	6,23	6,47	6,73

Balance Sheet budgeting	1	2	3	4	5	6
ASSETS						
Cash	3,96	6,44	8,01	8,12	8,42	8,75
Accounts receivable	1,42	2,91	3,06	3,21	3,37	3,54
Raw materials inventory	0,06	0,06	0,06	0,06	0,07	0,07
Finished goods inventory	0,08	0,08	0,09	0,09	0,10	0,10
Total current assets	5,52	9,49	11,21	11,49	11,95	12,47
Property, plant and equipment, net						
Insurance	1,00	1,00	1,00	1,00	1,00	1,00
Total fixed	1,00	1,00	1,00	1,00	1,00	1,00
Total assets	6,52	10,49	12,21	12,49	12,95	13,47
LIABILITIES						
Accounts payables	1,04	2,03	2,03	2,13	2,24	2,35
Current liabilities	1,04	2,03	2,03	2,13	2,24	2,35
Long term debt						
Non current liabilities	0,00	0,00	0,00	0,00	0,00	0,00
Capital	0,40	2,49	4,04	4,12	4,25	4,39
Retained earnings	5,07	5,97	6,14	6,23	6,47	6,73
Total owners' equity	5,47	8,46	10,18	10,35	10,71	11,12
Total liabilities and owners'equity	6,52	10,49	12,21	12,49	12,95	13,47

Cash budgeting	1	2	3	4	5	6
Cash balance, beginning						
Add receipts:						
Cash from sales	25,56	28,26	31,09	32,65	34,28	35,99
Total cash available	25,56	28,26	31,09	32,65	34,28	35,99
Less disbursements:						
Total costs of RM	10,43	9,90	10,40	10,92	11,47	12,04
Total costs of DM	1,12	1,12	1,12	1,26	1,26	1,26
Total costs of Overhead	0,03	0,03	0,03	0,03	0,03	0,03
Total Selling and administration expenses	10,03	10,78	11,54	12,31	13,10	13,91
Total operating expenses	21,60	21,82	23,09	24,52	25,86	27,24
Equipement piurchases						
Capital expenditures						
Dividends						
Total disbursements	21,60	21,82	23,09	24,52	25,86	27,24
Excess(deficiency) of cash available over disb.	3,96	6,44	8,01	8,12	8,42	8,75
Financing						
Borrowings						
Repayments						
Interest						
Total financing cash						
Cash balance, ending	3,96	6,44	8,01	8,12	8,42	8,75