

## **CHAPTER III**

### **FINANCIAL PLAN**

#### **Key Objectives and Financial Review**

There are three key financial objectives for “Aroy Dee” store. First, the store plan to have breakeven monthly sales within the first three months of operation. That will require the shop has to sell at least 293 of the smallest cups per day. Initial study shows the canteen has at least 2,000 customers per day during the summer period. To achieve this level, approximately 15% of the visitors will have to buy at least a small ice cream. “Aroy Dee” is quite confident that approximately 70% of the students who visit the store will buy at least that. The other 30% will buy larger ticket items because they represent better values.

The second financial objective is to recover the initial investments of 600,000 within the first 30 months of operation. Based on the projected sales numbers, “Aroy Dee” is going to get cash balance of about 565,400 Baht within the first 21 months of operation. The owner will not withdraw the initial investment until the store has enough cash reserve for continued operation. By the end of the third year of operation, the owner will withdraw 300,000 Baht from the business and another 300,000 Baht in the fourth year of operation.

The third financial goal is to be profitable in the first year of operations. Assuming the store sales ramp up at the projected rate, the store will be slightly profitable in the first year of operation. By the second year of operation, it should generate about 155,600 Baht in profit from about 2,900,000 Baht in sales.

## Establishment Costs

### Start-up Funding

The source of the startup funding will be solely from owner financing. The initial 600,000 Baht of investment will be from the owner's savings.

**Table6 Sources of Funding for the Business**

<b>Start-up Funding</b>	
Start-up Expenses to Fund	THB 600,000.00
Start-up Assets to Fund	THB 0.00
<b>Total Funding Required</b>	<b>THB 600,000.00</b>
<b>Assets</b>	
Non-cash Assets from Start-up	THB 0.00
Cash Requirements from Start-up	THB 600,000.00
Additional Cash Raised	THB 0.00
Cash Balance on Starting Date	THB 600,000.00
<b>Total Assets</b>	<b>THB 600,000.00</b>
<b>Liabilities and Capital</b>	
<b>Liabilities</b>	
Current Borrowing	THB 0.00
Long-term Liabilities	THB 0.00
Accounts Payable (Outstanding Bills)	THB 0.00
Other Current Liabilities (interest-free)	THB 0.00
<b>Total Liabilities</b>	<b>THB 0.00</b>
<b>Capital</b>	
<b>Planned Investment</b>	
Owner	THB 600,000.00
Investor	THB 0.00
Additional Investment Requirement	THB 0.00
<b>Total Planned Investment</b>	<b>THB 600,000.00</b>
Loss at Start-up (Start-up Expenses)	THB 0.00
<b>Total Capital</b>	<b>THB 600,000.00</b>
<b>Total Capital and Liabilities</b>	<b>THB 600,000.00</b>
<b>Total Funding</b>	<b>THB 600,000.00</b>

## Profit and Loss

**Table7 Estimated Profit and Loss for the First Three Years**

Pro Forma Profit and Loss					
	(THB)				
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Sales	2,902,500.00	3,219,750.00	3,541,725.00	3,895,897.50	4,012,774.43
Direct Cost of Sales	1,097,145.00	1,217,065.50	1,338,772.05	1,472,649.26	1,516,828.73
Other Cost of Sales	0.00	0.00	0.00	0.00	0.00
Total Cost of Sales	1,097,145.00	1,217,065.50	1,338,772.05	1,472,649.26	1,516,828.73
<b>Gross Margin</b>	<b>1,805,355.00</b>	<b>2,002,684.50</b>	<b>2,202,952.95</b>	<b>2,423,248.25</b>	<b>2,495,945.69</b>
<b>Gross Margin %</b>	<b>62.20%</b>	<b>62.20%</b>	<b>62.20%</b>	<b>62.20%</b>	<b>62.20%</b>
<b><u>Operating expenses</u></b>					
Payroll	516,000.00	516,000.00	567,600.00	624,360.00	643,090.80
Marketing/Promotion	800,000.00	500,000.00	550,000.00	605,000.00	623,150.00
Depreciation	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00
Rent	135,000.00	180,000.00	180,000.00	180,000.00	180,000.00
Utilities	45,000.00	60,000.00	66,000.00	72,600.00	74,778.00
Insurance	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00
<b>Total Operating Expenses</b>	<b>1,566,000.00</b>	<b>1,326,000.00</b>	<b>1,433,600.00</b>	<b>1,551,960.00</b>	<b>1,591,018.80</b>
<b>Profit Before Interest and Taxes</b>	<b>239,355.00</b>	<b>676,684.50</b>	<b>769,352.95</b>	<b>871,288.25</b>	<b>904,926.89</b>
<b>EBITDA</b>					
Interest Expense	0.00	0.00	0.00	0.00	0.00
Taxes Incurred	83,774.25	236,839.58	269,273.53	304,950.89	316,724.41
<b>Net Profit</b>	<b>155,580.75</b>	<b>439,844.93</b>	<b>500,079.42</b>	<b>566,337.36</b>	<b>588,202.48</b>
<b>Net Profit/Sales</b>	<b>5.36%</b>	<b>13.66%</b>	<b>14.12%</b>	<b>14.54%</b>	<b>14.66%</b>

The Profit and Loss table is summarized below:

Sales are projected to be about 2,902,000 in the first year of operation. The cost of the product included the ice cream, seasonings, and the utensils involved with the sales. The Gross Margin on goods sold is about 1,805,355 Baht. The Gross Margin in percent is 62.2%, which is on par with other food service businesses.

The two highest operating expenses are payroll, marketing and promotion, which are highest in the first year of operation. The cost of printing posters, brochures about the benefits of the fruits, and distributing free samples are part of marketing expenses. The cost of equipment used to store ice cream was depreciated over 7 years scheduling per Thailand's standard tax deduction law. The rent is 15,000 Baht per month for the space targeted. The casualties insurance for the store and the utilities rounded out the operating expenses.

Profit before interest and taxes (EBIT) are 239,300 Baht for the first year and 676,600 Baht in the second year. The higher cost of building brand recognition in the first year reduces the profit number. The business will not borrow any money for the operating and capital expenses. After tax profit for the first year is 155,500 Baht for the first year and 439,800 Baht in the second year. In the subsequent year, the store expects about 10% growth per year because of new products introduction and more brand recognition. The store expects other competitors are going to copy the product and try to break into the same market. The store expects new innovation will continue to keep the store fresh in the eyes of the consumers.

Using this number, the initial investment of 600,000 Baht would have been recovered after about 3 years of operation.

## Cash Flow

**Table 8 Estimated Cash Flow for the First Five Years of Business**

	2010	2011	2012	2013	2014
Sales Income	2,902,500.00	3,219,750.00	3,541,725.00	3,895,897.50	4,012,774.43
Investments	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00
<b>Total cash in at the end of the period</b>	<b>2,902,500.00</b>	<b>3,219,750.00</b>	<b>3,541,725.00</b>	<b>3,895,897.50</b>	<b>4,012,774.43</b>
<b>Cash Out</b>					
Administrative, Insurance	671,000.00	716,000.00	767,600.00	824,360.00	843,090.80
Marketing	800,000.00	500,000.00	550,000.00	605,000.00	623,150.00
Cost of Goods	1,097,145.00	1,217,065.50	1,338,772.05	1,472,649.26	1,516,828.73
Interest Expenses and Bank Charges	0.00	0.00	0.00	0.00	0.00
Capital Costs	250,000.00	50,000.00	50,000.00	50,000.00	50,000.00
Tax, GST, PAYG	83,774.25	236,839.58	269,273.53	304,950.89	316,724.41
Deposit	90,000.00	0.00	0.00	0.00	0.00
Other Cash out Payments	135,000.00	60,000.00	366,000.00	372,600.00	74,778.00
<b>Total Cash out at the end of the period</b>	<b>3,126,919.25</b>	<b>2,779,905.08</b>	<b>3,341,645.58</b>	<b>3,629,560.14</b>	<b>3,424,571.94</b>
Net difference	-224,419.25	439,844.93	200,079.42	266,337.36	588,202.48
<b>Cash Balance at the end of the period</b>	<b>35,580.75</b>	<b>475,425.68</b>	<b>675,505.09</b>	<b>941,842.45</b>	<b>1,530,044.93</b>

Even though the business will be profitable in the first year, the initial cost of starting the business weigh down on the cash flow of the company. The net cash flow for the first year will be negative 224,419.25 Baht as more money will be spent on renovating the store, buying equipment, buying furnitures and miscellaneous items to stock the store.

The second year will see positive cash flow as the business gets established and more realistic yearly expenses are being realized. In the third and fourth year of operation, the owner will withdraw 300,000 Baht of the initial investment out of the business each year. The cash flow will show lesser increase in year-over-year number.

By the end of the third year of operation, the business would have about 765,000 Baht of cash balance. The cash in the bank will be used to fund potential expansion of the business in the future.

### Net Present Value (NPV) and Internal Return Rate (IRR)

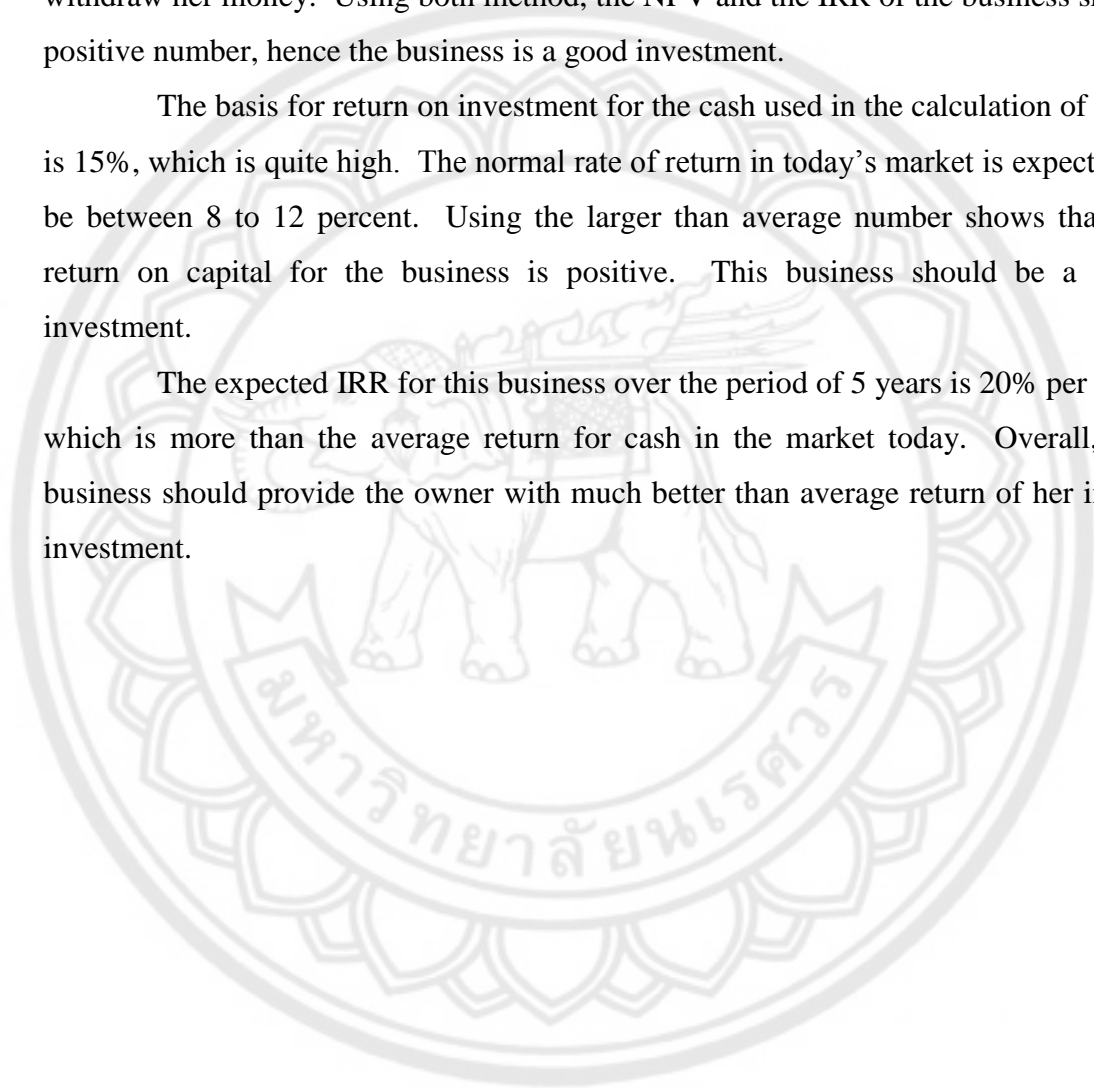
**Table 9 Calculation of the Net Present Value (NPV) and the Internal Return Rate (IRR)**

Cash flow Statement	Owner Withdraw Investment	Owner will not Withdraw Investment
Year		
0 Initial Investment	-฿600,000.00	-฿600,000.00
1 Receiving cash flow	-฿224,419.25	-฿224,419.25
2 Receiving cash flow	฿439,844.93	฿439,844.93
3 Receiving cash flow	฿200,079.42	฿500,079.42
4 Receiving cash flow	฿266,337.36	฿566,337.36
5 Receiving cash flow	฿588,202.48	฿588,202.48
Calculation of NPV by rate	15%	15%
Present Value	฿713,714.08	฿1,082,494.93
Initial Investment	-฿600,000.00	-฿600,000.00
Net present value (NPV)	฿113,714.08	฿482,494.93
Rate of return	20%	34%

The table shows net present value (NPV) and the (IRR) of the business calculated under two different plans. The first shows the NVP and IRR of the business assuming that the owner will withdraw her investment in the third year and the fourth year of the business. This plan is what is implemented in the current cash flow statement. The second column shows the NPV and IRR if the owner will not withdraw her money. Using both method, the NPV and the IRR of the business shows positive number, hence the business is a good investment.

The basis for return on investment for the cash used in the calculation of NPV is 15%, which is quite high. The normal rate of return in today's market is expected to be between 8 to 12 percent. Using the larger than average number shows that the return on capital for the business is positive. This business should be a good investment.

The expected IRR for this business over the period of 5 years is 20% per year, which is more than the average return for cash in the market today. Overall, this business should provide the owner with much better than average return of her initial investment.



## Balance Sheet

**Table 10 Estimated Balance Sheet for the First Year**

	Mar-10	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14
<b>Current Assets</b>						
<b>Cash on Hand</b>						
Checking Account	250,000	25,581	465,426	665,505	931,842	1,520,045
Petty Cash	10,000	10,000	10,000	10,000	10,000	10,000
Etc	0	0	0	0	0	0
<b>Total Cash on hand</b>	<b>260,000</b>	<b>35,581</b>	<b>475,426</b>	<b>675,505</b>	<b>941,842</b>	<b>1,530,045</b>
<b>Pre-payments</b>						
General	0	0	0	0	0	0
Insurance	0	0	0	0	0	0
Etc	0	0	0	0	0	0
<b>Total Pre-payments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Inventory</b>						
Ice cream	25,000	25,000	25,000	25,000	25,000	25,000
Fruits	18,000	18,000	18,000	18,000	18,000	18,000
Etc	7,000	7,000	7,000	7,000	7,000	7,000
<b>Total Inventory</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>
<b>Total Current Assets</b>	<b>310,000</b>	<b>85,581</b>	<b>525,426</b>	<b>725,505</b>	<b>991,842</b>	<b>1,580,045</b>
<b>Fixed Assets</b>						
Leasehold	90,000	90,000	90,000	90,000	90,000	90,000
Building & Improvements	100,000	100,000	100,000	100,000	100,000	100,000
Furniture & Fixtures	50,000	50,000	50,000	50,000	50,000	50,000
Etc	50,000	50,000	50,000	50,000	50,000	50,000
<b>Total Fixed Assets</b>	<b>290,000</b>	<b>290,000</b>	<b>290,000</b>	<b>290,000</b>	<b>290,000</b>	<b>290,000</b>
<b>Total Assets</b>	<b>600,000</b>	<b>375,581</b>	<b>815,426</b>	<b>1,015,505</b>	<b>1,281,842</b>	<b>1,870,045</b>
<b>Liabilities</b>						
<b>Current Liabilities</b>						
Credit Cards	0	0	0	0	0	0
Outstanding Debtors	0	0	0	0	0	0
Etc	0	0	0	0	0	0
<b>Total Current Liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Long Term Liabilities</b>						
Loan from Owner	600,000	600,000	600,000	300,000	0	0
	Mar-10	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14



**Table 10 (Cont.)**

	Mar-10	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14
<b>Current Assets</b>						
<b>Cash on Hand</b>	0	0	0	0	0	0
Loan from Bank	0	0	0	0	0	0
<b>Total Long Term</b>	<b>600,000</b>	<b>600,000</b>	<b>600,000</b>	<b>300,000</b>	<b>0</b>	<b>0</b>
<b>Total Liabilites</b>	<b>600,000</b>	<b>600,000</b>	<b>600,000</b>	<b>300,000</b>	<b>0</b>	<b>0</b>
<b>Net Assets</b>	<b>0</b>	<b>-224,419</b>	<b>215,426</b>	<b>715,505</b>	<b>1,281,842</b>	<b>1,870,045</b>
		<b>-224,419.25</b>	<b>439,844.93</b>	<b>200,079.42</b>	<b>266,337.36</b>	<b>588,202.48</b>

The company starts with an investment of 600,000 Baht from the owner's savings. In the first year of operation, the business has negative net asset value of negative 134,000 Baht because much of the initial long-term liabilities from the owner were spent on renovating the stores, and acquiring furnitures and equipment needed for the operations. After the first year, the business is showing positive net asset values. In the third and fourth year of operation, the owner will withdraw the initial investments in two equal installments.

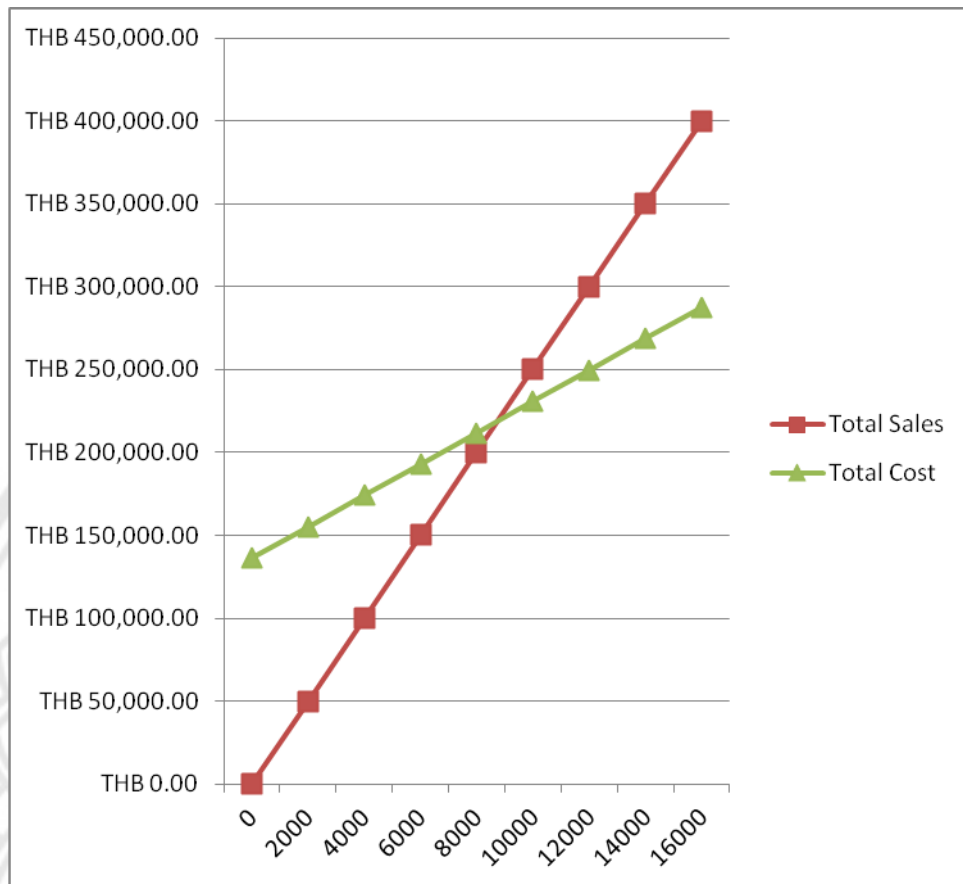
By the end of the fifth year of operations, the business would have more than 1,600,000 Baht of cash on hand and net asset values of more than 1,900,000 Baht. If the projection holds true for the business, it would have shown to be a great investment as the return on the initial investment will be approximately three times the initial investment within 5 years of operation.

### Break-even analysis

**Table11 Break-even Cost Analysis**

Revenue per unit	THB 25.00
Average Cost per unit	THB 9.45
Average Monthly Fixed cost	THB 136,333.33
<b>In order to cover fixed-cost expenses, the company need to have break-even revenue per month of:</b>	<b>THB 219,200.00</b>
<b>Volume of sales needed to break even per month:</b>	<b>8,768</b>

The company has to sell at least 8,767 scoops of ice cream or total of 219,185 Baht of income every month to breakeven. Based on the sales projection chart, the company will be cash flow positive every month including the month with the lowest sales in January, April, November, and December.



**Figure 9 Monthly Break Even Analysis Graph**