

CHAPTER VI

RETAIL OUTLET PROPOSAL ANALYSIS

Having made out a dependably accurate estimate of the sales potential of the proposed new outlet, a Retail Outlet Proposal Analysis is imperative. This analysis purports to show the justification of the proposal in terms of return on investment and other criteria such as pay-back period (or payout period) and the Discounted Rate of Return on investment.

First and foremost, the area salesman or the person concerned who makes this proposal will have to determine in what proportion of the different grades of gasoline is the estimated volume composed of. To do this, the salesman will first determine the types of retail trade he expects the proposed outlet to be capable of doing: that is, he has to determine the percent breakdown of the estimated sales of each grade of gasoline - premium gasoline, ordinary gasoline and diesel. There are no hard and fast guidelines. The salesman will make use of his experience and knowledge of the area to arrive at this percentage breakdown. For example, he may base his analysis on the breakdown of sales of different grades of gasoline of another

outlet of the company in the vicinity, or on the proportion of the types of traffic -residential, commercial and transient in the area.

In the illustration used, since it is predominantly a residential area, the following breakdown is reasonably accurate:

Breakdown of Estimated Sales Volume by Grade

1) Esso Extra Gasoline	60%	129,600 I.G.	155,200 A.G.
2) Esso Ordinary Gasoline	20%	43,200	51,840
3) Esso Diesel	20%	43,200	51,840
		<hr/>	<hr/>
		100%	216,000 I.G. 258,880 A.G.
		<hr/>	<hr/>

For the Retail Outlet Proposal Analysis, commonly known as B.U.D. - 12, the estimated sales of each grade of gasoline are required. However, the B.U.D. - 12 calculations are in American units, that is U.S. \$ and U.S. Gallon or American Gallon (A.G.), therefore conversion from the Imperial gallons (I.G.)³⁰ of the estimated sales and Malayan \$ have to be made.

$$M\$1 = U.S.\$0.3256$$

The conversion factors are

$$1 \text{ I.G.} = 1.2 \text{ A.G.}$$

³⁰ Projects have to be approved by E.S.E., New York. Thus conversion into American units - A.G. and U.S.\$ - is necessary so that computer processing can be facilitated.

As the primary objective of the B.U.D. - 12 is to assess the justification of such an investment, the Retail Gross profit is of secondary importance as it pertains to the operation of a dealer only.

The per unit wholesale gross profit margin is obtained by adding the gross profit margin for each grade of gasoline to the difference between its pump price (i.e. price at the outlet) and its list price (i.e. price ex-storage point or supply point). The calculation for the wholesale gross profit margins for each grade of gasoline is as follows:

	<u>Extra</u>	<u>Ordinary</u>	<u>Biesel</u>
Pump price per I.G.	M\$2.17	M\$2.02	M\$0.66
List price per I.G.	2.17	2.02	0.65
Difference in M\$ per I.G.	-	-	M\$0.01
Converted to U.S. ¢			
31	-	-	U.S.0.00271¢
per A.G.			

31 Conversion is shown as follows:
 $1 \text{ I.G.} = 1.2 \text{ A.G.}$
 $\text{M\$1} = \text{U.S. \$0.3256}$
 $\text{Difference of M\$1 per I.G.} = \text{U.S. \$0.3256} \times \frac{1}{1.2} \text{ per A.G.}$
 $\text{Difference of 1¢(M) per I.G.} = \text{U.S. } \frac{0.3256}{100} \times \frac{1}{1.2} \text{ ¢ per A.G.}$
 $= \text{U.S. 0.00271 ¢ per A.G.}$

Add: Gross Profit
Margin

32
per A.G.

U.S.O.07888¢

0.07313¢

0.04923¢

Wholesale Gross
Profit Margin
per A.G.

U.S.O.07888¢

U.S.O.07313¢

U.S.O.04923¢

The motor-oil sale volumes are found from experience to be slightly over 1% of the corresponding grades of gasoline. Thus, the estimated sales volume of Esso Extra Motor Oil is 1,700 A.G. per year, and Esso Motor Oil is estimated at 520 A.G. per year. The wholesale gross profit margins for these products are obtained from the table of gross profit margins. 33

The rest of the section on Operating Analysis are self-explanatory and the calculations are shown in the worksheet for B.U.D. - 12 attached. Depreciation is calculated at 5% on improvements and 10% in equipment. 34

On the section, Budget Proposal, under

32
These gross profit margins are obtained from Gross Margin Table computed by the U.S.M.L.'s Marketing Analysis Dept.

33
Loc. cit.

34
For the purpose of B.U.D. - 12 calculation, the depreciation rates are stated as above. The writer was made to understand that for purpose of writing off the book values of assets, straight-line depreciation is used.

ILLUSTRATION 12 RETAIL OUTLET . . . ANALYSIS PROPOSAL

COMPANY/DIVISION

DEALER/LOCATION

SALESMAN

DATE:
APP. NO.

OPERATING ANALYSIS

RETAIL GROSS PROFIT				PRODUCT OR SERVICE	WHSLE GROSS PROFIT	
Estimated	per unit	Amount	% of Tot		per unit	Amount
155,200				Esso Extra Gasoline	.07888	\$12242
51,840				Esso Gasoline	.07313	3791
51,840				Diesel	.05194	2693
				Less Comm. Disc.		
258,880			%	Total Fuels		\$18726
1,700				Esso Extra M.O. *		1128
520				Esso M.O. *		239
				Other Motor Oils		
2,220			%	Total Motor Oil		\$ 1367
200				Esso Gear Oils	.44020	88
				Esso A.T. Fluid		
1,000				Grease (resale only)	.03196	32
	%			Tires and Tubes - New & Used		
	%			Batteries		
500	%			Accessories & Specialties	15%	75
	%			Other Resale Merchandise		
			%	Total other Products		\$ 195
	100%			Lubrication Jobs		
	100%			Special Lubrication		
	100%			Wash, Polish, Wax		
	100%			Other Services		
	100%			Repair Income		
	100%		%	Total Service:		
	100%		%	Other Income (Parking, etc.)		
Gal. 261,400	c		100%	Total Gross Profit		\$20288
DEALER'S PROFIT OR LOSS			Amount	% of Gross Profit	COMPANY PROFIT OR LOSS	
					per unit	Amount
Salaries & Wages						\$ 280
Men @ Men @						619
Men @ Men @						
Ins. & Ins. on Empl.						
Value Dealer's Labor						
Total Labor				%		
Utilities						\$ 4438
Permits & Licenses						\$15866
Uniform & Laundry						\$ 1368
Printing Supplies						
Advertising						1139
Discount other than M.F.						156
Depreciation						576
Interest & Taxes						
Losses & Bad Debts						131
Other						\$ 2002
Total Other Expense				%		\$ 634
Rent or Real Estate Expense				%		
Total Expense				%		
Business Profit				%		\$15222
Dealer Labor				%		

BUDGET PROPOSAL

LEASE ☐ DEVELOP ☐ REMODEL ☐ OTHER ☐

Size of Property 12,000 sq. ft.

For Fuel Business in Trading Area

Gal. Type of Building 62-50-2

Served From LRP R. T. Miles 5

Before Proposal		After Proposal		Proposed	
		PRESENT BOOK VALUE	THIS PROPOSAL	TOTAL INVESTMENT	ADJUSTED INVESTMENT
1 Land	(M\$30,000)	-	\$19586	\$19586	\$19586
2 Improvements	(M\$30,000)	-	9768	9768	9768
3 Equipment	(M\$20,000)	-	6512	6512	6512
4 Sub-Total		-	\$35816	\$35816	\$35816
5 Expense		-	\$35816	\$35816	\$35816
6 Total		-	\$35816	\$35816	\$35816
7 Company Lease Conditions:	Period	-	Rate	Options	- Yrs.
8 Dealer Lease Conditions:	Period	-	Rate		
9 Net Profit Before Income Tax				Budget Average	\$15222
10 Net Profit After Income Tax (Rate 40 %)					9133
11 % Return on Investment					25.5 %
12 Payout Period					3.5 Yrs.
13 Investment Cost Per Barrel (Sales 42 AG Bbls.) (Total Adjusted Invest + Total Fuel Sales Bbls.)				6164	\$ 5.81

*See Work Sheet.

Exchange Rates: M\$1 = US\$0.3256

OUTLET: _____

LOT: _____, _____ TOWN

DATE: _____ 19__

Motor Oil

(01.)

(30.)

(20.)

TOTAL

Sales	Gross Profit	Delivery	Net Profit	Amount
850	-	-	.54072	\$ 467
510	-	-	.84486	431
340	-	-	.67647	230
1700				\$ 1128

Grease

(50.)

(30.)

(20.)

TOTAL

-	-	-	.49820	\$ 129
260	-	-	.43004	67
156	-	-	.40905	43
104	-	-		\$ 239
520				

Motor Depot

(Total Fuels)

(Total Lube Oils)

Sales	Unit	Amount
258,880	.00093	\$ 241
2,520	.01533	39
TOTAL		\$ 280

Total VOL of All Products x Factor

(Total VOL of M. Fuels Delivered
by Tank Truck Only x Factor x R.
Trip Distance

261,400	.00217	\$ 567
258,880	.0000415	52
TOTAL		\$ 619

Expense

: 4 Pumps @ \$ 144 each

Runner: - Pumps @ each

TOTAL

\$ 576

\$ 576

Service

Service Station: \$131.00

Filling Station: \$ 49.00

TOTAL

\$ 131

\$ 131

NOTE: Mol. CO = US. C. 2223

Motor Oil : 6/1 Ctn = 6.00 IG

2 1/2 P. Ctn. = 2.5 IG

Grease: 10 lbs = 1 AG

2 1/2 t. Ctn. = 5 IG

improvements are included items such as station building, lubricatories, Esso Oval, etc. Equipment include pumps, air-meters, underground tanks, car hoists and car wash ramp, etc. Installation costs of these items of equipment are also included.

The rate of return is 25.5%³⁵, and the pay-out (or pay back) period is 3.5 years. The proposal is, therefore, attractive. Generally, the B.U.D. - 12 is an approximate calculation of the economic feasibility of the proposed outlet. If the rate of return on investment is less than 10%, then a discounted rate of return must be run. For the purpose of illustration, the discounted rate of return (also known as the discounted cash flow analysis) on the investment is also shown below.

The D.C.F. Analysis covers a period of 20 years. The base year volume, as stated previously, is the volume estimated which is also the second year

³⁵ This is a simple rate of return on investment calculated by the formula: $\frac{\text{Annual net profit after tax}}{\text{total investment}}$. It is apparent that the rate of return on investment cannot be the same throughout the life of the proposed outlet. However, it is necessary to determine this simple rate of return to find out whether a proposed outlet is worthwhile invested in at the outset.

Any possible variation of the rate of return on investment in the subsequent years has been safeguarded by taking into consideration the growth rates of the proposed outlet (see D.C.F. analysis, line 2).

volume. The growth rates from year 1 to year 20 are
36
as given.

In the analysis, "the average gross profit margin after marketing expenses" is derived by reducing the total gross profits by the wholesale and station expenses as calculated in the B.U.D. - 12; this difference is then divided by the number of barrels obtained in B.U.D. - 12 also. Therefore, "The average gross profit margin after marketing expenses" = $\frac{\$20288 - 4432 - 2002}{6164}$ per bbl.

= \$2.2 per bbl.

The gross profit is then calculated by multiplying the annual volume/year by the average gross profit margin obtained.

The residual value is equal to the value of land at its acquisition cost, since improvements and equipment, which are depreciated at 5% and 10% annually respectively, will be reduced to zero after twenty years.

The rest of the analysis are self-explanatory. When the yearly cash flows (line 12 in the D.C.F.

36
These growth rates are obtained from the graph of growth rates for a period of 20 years which was prepared mainly for this purpose by E.S.M.L.'s Marketing Analysis Dept.

analysis) are obtained, the DCF rate of return can then be determined. This is calculated to be 27.5%, which is very favourable.

It is assumed that up to this point, approval for establishing a service station in the particular area has been obtained from the authority concerned. This is necessarily so, otherwise all the efforts in selecting and evaluating a particular site will be wasted. When the proposed new outlet has been justified by the Retail Outlet Proposal Analysis, or the BUD - 12, in terms of rate of return on investment, pay back period and the DCF rate of return, and in some cases, by the urgency and desirability of having an outlet at a particular area, authorization or appropriation of funds is made out for the development of the proposed outlet.

In the meantime, tender for construction is invited from the company's contractors. Also the area salesman who is in charge of this particular area will be looking for a suitable person to operate this outlet. Once construction is completed, the selected dealer will commence operation.

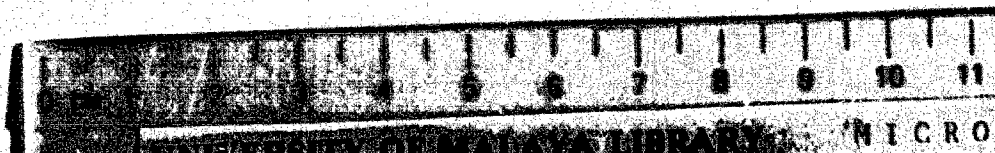
PHYSICAL

ESSO STATION

DISCOUNT

YEAR	0	1	2	3	4	5	6
1. INVESTMENT (\$ '000)	35.8						
2. GROWTH RATE		97	100	113	119	122	124
3. ANNUAL VOLUME BARREL/YEAR (2) X 6164		5979	6164	6365	7205	7520	7642
4. AVERAGE GROSS PROFIT MARGIN AFTER AVERAGE MARKETING EXP.		2.2					
5. GROSS PROFIT (\$ '000) (3) X (4)		13.2	13.6	14.3	16.1	16.5	16.8
6. REVENUE RECEIVED* (\$ '000)		1.4	1.4	1.4	1.4	1.4	1.4
7. LEASE RENTAL	NIL						
8. NET PROFIT BEFORE TAX (\$ '000)		14.6	15.0	15.7	17.5	17.9	18.2
9. COMPANY TAX AT 40% (\$ '000)		5.8	6.0	6.3	7.0	7.2	7.7
10. NON-RECURRING EXPENSE	NIL						
11. RESIDUAL VALUE (\$ '000)							
12. CASH FLOW (\$ '000)		8.8	9.0	9.4	10.5	10.7	10.5

* Refer to Retail Outlet Proposal Analysis (DUD - 12).



MARGIN MARTIN

PHYSICAL CAPITAL CAPITAL BUDGET 1966

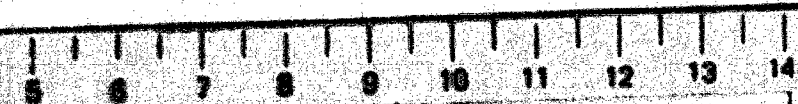
ESSE STANDARD MALAY MALAYA LIMITED COMPANY

DISCOUNTED CASH CASH FLOW ANALYSIS

RETAIL OUTLINES

2	3	4	5	6	7	8	9	10	11	12	13
100	113	119	122	124	126	128	130	132	134	136	138
1164	6965	7235	7520	7643	7767	7891	8015	8139	8263	8387	8511
13.6	14.3	15.1	15.5	15.8	17.1	17.1	17.0	16.8	16.7	16.5	16.3
1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
14.0	15.7	17.5	17.9	18.2	18.5	18.8	19.1	19.4	19.7	20.0	20.3
6.0	6.3	7.0	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
9.0	9.4	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.1	12.3

13 (BUD - 12).



AWY

	11	12	13	14	15	16	17	18	19	20
	123	122	121	120	119	118	117	116	116	115
	7582	7520	7458	7397	7335	7274	7212	7150	7150	7089
										→
	16.7	16.5	16.4	16.3	16.1	16.0	15.9	15.7	15.7	15.6
	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
										→
	18.1	17.9	17.8	17.7	17.5	17.4	17.3	17.1	17.1	17.0
	7.2	7.2	7.1	7.1	7.0	7.0	6.9	6.8	6.8	6.8
										→
										20.0
	10.9	10.7	10.7	10.6	10.6	10.4	10.4	10.3	10.3	30.2

CALCULATION OF THE DISCOUNTED RATE OF RETURN

Year	Cash Inflow (\$ '000)	28% Discount Factor*	Present Value (\$ '000)	28% Discount Factor*	Present Value (\$ '000)
1	8.8	0.794	6.9872	0.781	6.8728
2	9.0	0.630	5.6700	0.610	5.4900
3	9.4	0.500	4.7000	0.477	4.4398
4	10.5	0.397	4.1585	0.373	3.9165
5	10.7	0.315	3.3705	0.291	3.1137
6	10.9	0.250	2.7250	0.227	2.4743
7	11.1	0.198	2.1978	0.178	1.9758
8	11.1	0.157	1.7427	0.139	1.5429
9	11.0	0.125	1.3750	0.108	1.1880
10	10.9	0.099	1.0791	0.085	0.9265
11	10.9	0.079	0.8611	0.066	0.7194
12	10.7	0.062	0.6634	0.052	0.5564
13	10.7	0.050	0.5350	0.040	0.4280
14	10.6	0.039	0.4134	0.032	0.3392
15	10.5	0.031	0.3255	0.025	0.2625
16	10.4	0.025	0.2600	0.019	0.1976
17	10.4	0.020	0.2080	0.015	0.1559
18	10.3	0.016	0.1648	0.012	0.1236
19	10.3	0.012	0.1236	0.009	0.0927
20	30.2	0.010	0.3020	0.007	0.2114
					\$35.9711

\$25.0711