Fixed Operations 2 -

Financial Calculations and Formulas

Clear Lake Infiniti

Dealership

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Student

N393

Class #

· Service

Service Department Sales And Gross (Labor Only)

Category	Sales	Gross	Gross as % of Sales	%Sales Contribution
Customer Pay	$ 148,712	$ 118,771	79.87%	53.96%
Customer			0%	0.00%
Customer Other			0%	0.00%
Warranty	$ 61,770	$ 51,781	83.83%	22.41%
Warranty Other			0%	0.00%
Internal	$ 65,125	$ 53,649	82.38%	23.63%
NVI / Road Ready/ PDI			0%	0.00%
Adj. Cost Of Labor		$ (2,238)	0%	0.00%
Total	$ 275,607	$ 221,963	80.54%	100.00%

The Picture

Customer Pay Gross Profit %	79.87%
Total Service Dept. G.P. %	80.54%

Parts To Labor Ratios

Category	Parts Sales	Labor Sales	P/L Ratio
Customer Pay	$ 136,151	$ 148,712	0.92
Customer	-	$ -	0.00
Customer Other	-	$ -	0.00
Warranty	$ 198,085	$ 61,770	3.21
Warranty Other	-	$ -	0.00
Internal	$ 82,051	$ 65,125	1.26
Total	$ 416,287	$ 275,607	1.51

The Picture

Customer Pay Gross Profit %	79.87%
Total Service Dept. G.P. %	80.54%
Parts / Labor Ratio (Cust. Pay Only)	0.92

Service Department Profit Centering

Expense Category	Dollar Amount	% of Gross	Profile
Department Gross	$ 221,963		
Variable Expense	$ 59,775	26.93%	
Selling Expense		0.00%	
Personnel Expense		0.00%	
Semi-Fixed Expense	$ 9,527	4.29%	
Fixed Expense	$ 53,737	24.21%	
Unallocated Expense		0.00%	
Dealer's Salary		0.00%	
Total Expenses	$ 123,039	55.43%	
Net Profit	$ 98,924	44.57%	

The Picture

Customer Pay Gross Profit %	79.87%
Total Service Dept. G.P. %	80.54%
Parts / Labor Ratio (Cust. Pay Only)	0.92
Total Service Dept. Expenses	$ 123,039

Fixed Absorption

		% Adj Ovhd Exp
Parts Department Total Gross	$ 312,090	53.07%
Service Department Total Gross	$ 224,201	38.13%
Body Shop Department Total Gross		0.00%
Total Fixed Gross Profit	$ 536,291	
Total Dealership Expense	$ 588,048	

Overhead Expense	$ 588,048	
Total Fixed Gross Profit	$ 536,291	
Total Dealership Expense	$ 588,048	
Fixed Absorption Percentage	91.20%	
		Guideline 60%

The Picture

Customer Pay Gross Profit %	79.87%
Total Service Dept. G.P. %	80.54%
Parts / Labor Ratio (Cust. Pay Only)	0.92
Total Service Dept. Expenses	$ 123,039

NADA ACTUAL SERVICE ANALYSIS

	Labor Sales / Month		Effective Labor Rates		Hours Billed
Customer Pay	$ 148,712	÷	151.78	=	979.8
Customer	$ -	÷		=	0.00
Customer Other	$ -	÷		=	0.00
Warranty	$ 61,770	÷	175.00	=	353.0
Internal	$ 65,125	÷	175.00	=	372.1
New Vehicle Prep	$ -	÷		=	0.00
Total	$ 275,607				1704.9

POTENTIAL

$ 275,607	÷	1704.90	=	$ 161.66			
Total labor sales for month		Total hours billed		Effective Labor Rate			
12.00	x	8	x	23	=	2,160.0	
# Service mechanical technicians		# Hours/Day		Working Days/Month		Hours Available to Sell	
2,160.0	x	$ 161.66	=	$ 349,176		$ 436,470.49	
Hours Available to Sell		Effective Labor Rate		Labor sales potential @100%		Labor sales potential @ 125%	

How proficient are your technicians ?

1,704.9	÷	2,160.00	=	78.93%
Total Hours Billed		Hours Available to Sell		Tech Proficiency

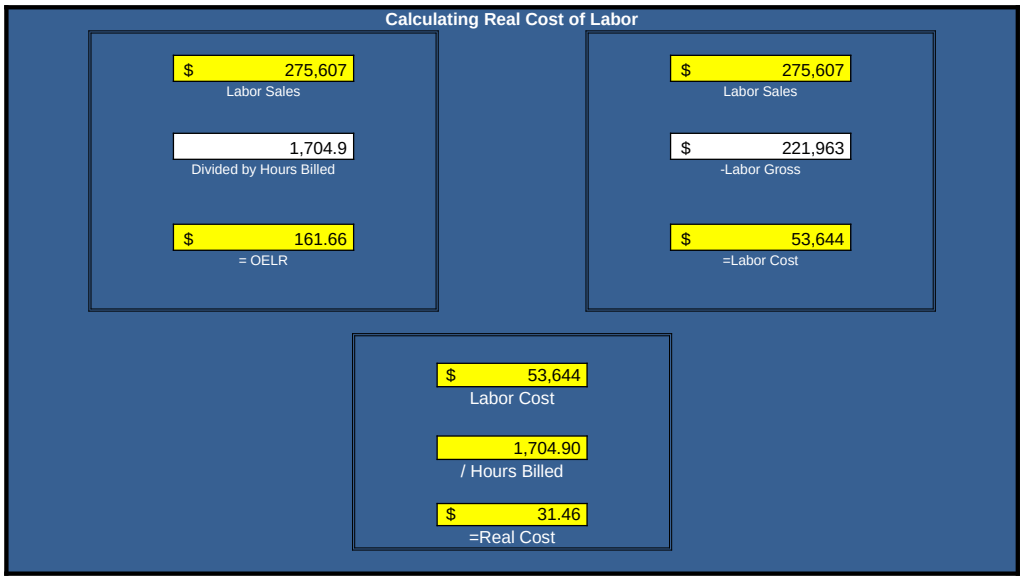
Hours Per RO (RO Analysis)	2.9
Percent of One Item R.O.'s (RO Analysis)	56.00%
Customer Pay Effective Labor Rate (DMS Reoprt)	$ 151.78
Warranty Labor Rate (DMS Report)	$ 175.00
Total Overall Effective Labor Rate	$ 161.66
Overall Technician Proficiency	78.93%

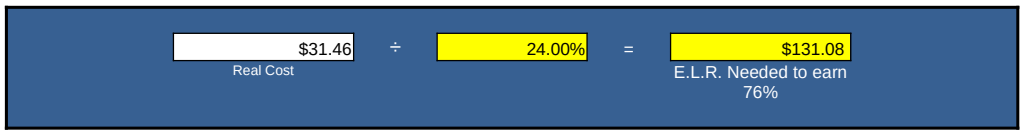
FACILITY POTENTIAL

Number of Bays	18	
	x	
Number of Days	23	
	x	
Number of Hours	12	
	x	
Effective Labor Rate	$ 161.66	
	equals	
FACILITY POTENTIAL		$ 803,106

FACILITY UTILIZATION

Total Labor Sales	$ 275,607	
	÷	
Facility Potential	$ 803,106	
	equals	
FACILITY UTILIZATION		34.32%

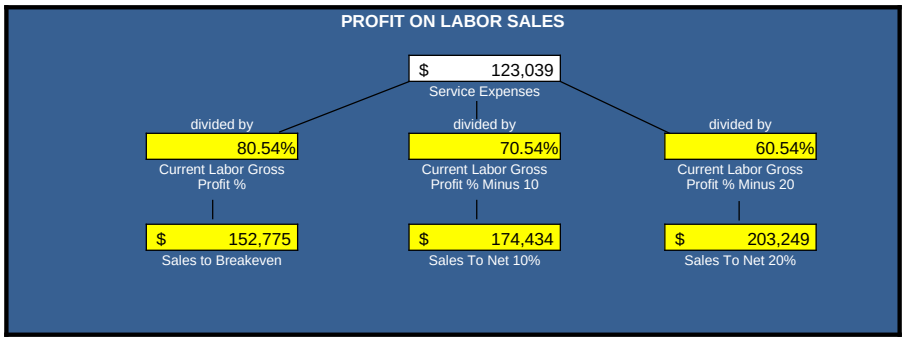

Calculating Real Cost of Labor
$ 275,607
Labor Sales
1,704.9
Divided by Hours Billed
$ 161.66
= OELR
$ 275,607
Labor Sales
$ 221,963
-Labor Gross
$ 53,644
=Labor Cost
$ 53,644
Labor Cost
1,704.90
/ Hours Billed
$ 31.46
=Real Cost


$31.46
Real Cost
÷
24.00%
=
$131.08
E.L.R. Needed to earn
76%

OWNER BASE POTENTIAL

2309	x	8	=	18,472.0
5 Year Owner Base		Annual Hours Purchased		Market Potential / Hours
18,472.0	x	$ 161.66	=	$ 2,986,106
Market Potentail/ Hours		Effective Labor Rate		5 Yr. O.B Sales Potential
$ 210,482	x	12	=	$ 2,525,784
Avg. Mos. Labor Sales (excluding internal, PDI and NVI)		Annualized		Current Labor Sales Trend
$ 2,525,784	÷	$ 2,986,106	=	84.58%
Labor Sales Trend		5 Yr. O.B. Sales Potential		Ouch

**Note: The industry average of 35% is very poor performance.*



The Picture

Customer Pay Gross Profit %	79.87%	Customer Pay E.L.R.	$ 151.78
Total Service Dept. G.P.%	80.54%	Total (overall) E.L.R.	$ 161.66
Parts / Labor Ratio (Cust Pay Only)	0.92	Warranty Labor Rate	$ 175.00
Total Service Dept Expense	$ 123,039	Overall Tech Proficiency	78.93%
Hours Per R.O (recap)	2.90		
Percent Of One Item R.O.'s	56.00%		

Technician Value

Calculate using daily available hours per technician

Hours		Days		Labor Rate		Sales Value
8	x	23	x	$ 161.66	=	$ 29,745

Sales Value		Gross Margin		Profit Value
$ 29,745	x	80.54%	=	$ 23,955

Profit Value		Proficiency		Adjusted Profit Value
$ 23,955	x	70%		$ 16,769
$ 23,955	x	80%		$ 19,164
$ 23,955	x	90%		$ 21,560
$ 23,955	x	100%		$ 23,955
$ 23,955	x	110%		$ 26,351
$ 23,955	x	120%		$ 28,746
$ 23,955	x	0.0%	=	$ -
		Your Proficiency #		

STAFFING REQUIREMENTS

A. Sales To Break Even

Service Expenses for One Month	÷	Current Gross Profit Percent	=	Sales To Break Even
$ 123,039	÷	80.54%	=	$ 152,775

B. Sales To Generate 20% Net

Service Expenses for One Month	÷	Current Gross Profit Percent (Minus 20)	=	Sales To Generate 20% Net
$ 123,039	÷	60.54%	=	$ 203,249

C. Technician Value

Daily Work Hours	X	Average Proficiency Rate	X	Overall Effective Labor Rate	X	Work Days Per Month	=	Technician Value
8		80%		$ 161.66		23		$23,796
8		90%		$ 161.66		23		$26,770
8		100%		$ 161.66		23		$29,745
8		120%		$ 161.66		23		$35,694

D. Staffing To Break Even

Sales To Break Even	÷	Technician Value		=	Staffing
$ 152,775	÷	23,796	@ 80%	=	6.4
$ 152,775	÷	26,770	@ 90%	=	5.7
$ 152,775	÷	29,745	@ 100%	=	5.1
$ 152,775	÷	35,694	@ 120%	=	4.3

E. Staffing To Generate 20% Net

Sales To Generate 20% Net	÷	Technician Value		=	Staffing
$ 203,249	÷	$ 23,796	@ 80%	=	8.5
$ 203,249	÷	$ 26,770	@ 90%	=	7.6
$ 203,249	÷	$ 29,745	@ 100%	=	6.8
$ 203,249	÷	$ 35,694	@ 120%	=	5.7

Service Advisor Performance

How To Set Advisor Sales Objectives To: Beak Even, Net 10%, & Net 20%

Break Even

1	Service Department's Monthly Expenses	$123,039
	÷	
2	Divide by current labor gross profit % to break even	80.54%
	=	
3	Equals New Sales Objective	$ 152,775
	÷	
4	Number of Advisors	7.0
	=	
5	Equals Sales Objective per Advisor	$ 21,825
	÷	
6	Number of work days per month	23
	=	
7	Equals daily sales objective per advisor	$ 949
	÷	
8	Current overall effective labor rate	$ 161.66
	=	
9	Equals daily sales objective per advisor (FRH's)	5.9

Net 10 %

1	Service Department's Monthly Expenses	$123,039
	÷	
2	Divide by current labor gross profit % minus 10 to net 10%	70.54%
	=	
3	Equals New Sales Objective	$ 174,434
	÷	
4	Number of Advisors	7.0
	=	
5	Equals Sales Objective per Advisor	$ 24,919
	÷	
6	Number of work days per month	23
	=	
7	Equals daily sales objective per advisor	$ 1,083
	÷	
8	Current overall effective labor rate	$ 161.66
	=	
9	Equals daily sales objective per advisor (FRH's)	6.7

Net 20 %

1	Service Department's Monthly Expenses	$123,039
	÷	
2	Divide by current labor gross profit % minus 20 to net 20%	60.54%
	=	
3	Equals New Sales Objective	$ 203,249
	÷	
4	Number of Advisors	7.0
	=	
5	Equals Sales Objective per Advisor	$ 29,036
	÷	
6	Number of work days per month	23
	=	
7	Equals daily sales objective per advisor	$ 1,262
	÷	
8	Current overall effective labor rate	$ 161.66
	=	
9	Equals daily sales objective per advisor (FRH's)	7.8

Exercise to See What Happens When You Increase Your Hours Per Repair Order

Number of customer R.O.'s for the month			557
	x		
Multiply by .3 hours			0.3 hours
Additional customer labor hours generated	=		167.10
	x		
Multiply by Customer Labor Rate			$ 151.78
Equals additional Customer Labor Sales Generated	=		$ 25,362
	x		
Multiply by customer Labor Gross Profit %			79.87%
Equals additional Labor Gross Profit $ generated	=	(A)	$ 20,256
Divide Parts Sales R.O. by Labor Sales R.O. to calculate $ parts sales per 1$ of Labor Sales	=		0.92
	x		
Multiply by Customer Labor Sales			$ 25,362
	=		
Equals additional Customer Parts Sales generated			$ 23,220
	x		
Multiply by Customer Parts Sales Gross Profit %			42.20%
Equals additional Parts Gross Profit $ Generated	=	(B)	$ 9,799
Add Gross Profit from Labor (A) and Parts (B)	=		$ 30,055

Labor Rate Calculations

1 Calculate the **Labor Rate** for the following operation.

A/C Charge and Check

Labor Price	$144.00
Units	1.2

Price	÷	Units	=	Labor Rate
				$0.00

2 Calculate the **Effective Labor Rate** for the following "Repair" operations.

Labor Operations	Labor Price		Labor Units		Labor Rate
Clean Fuel Injectors	$ 117.60	÷	1.20	=	
R&R Rear Hub Bearing.	$ 96.00	÷	0.80	=	
Replace Trans. Pan gasket	$ 107.80	÷	1.10	=	
R&R Headlight unit (1)	$ 108.00	÷	0.90	=	
	Total Price	÷	Total Units	=	$0.00
					Effective Labor Rate

(For This R.O.)

Calculating Mark-Up

3 Using the following formula, mark-up a part costing $6.72 to attain a 35% gross profit (round to the nearest cent)

100%			=	0.00
100%		Desired Gross Profit percent		Mark-Up Factor
	X	0.00	=	$0.00
Part Cost		Mark-Up Factor		Retail Price

4 Calculate the "Weighted Average" price at a 40% Gross Profit for the following parts (round to the nearest cent)

Item	Cost		Annual Turnover		Total Cost
Filter #1	$4.36	X	112	=	
Filter #2	$4.01	X	56	=	
Filter #3	$3.56	X	85	=	
Filter #4	$3.86	X	202	=	
Filter #5	$3.51	X	36	=	
	Total Items		491	Total Cost	$0.00

$ -	÷	491	=	$ -
Total Cost		Total Items		Weighted Average **Cost**
$ -	X		=	$ -
Weighted Average Cost		Mark-Up Factor		Weighted Average **Price**

Cost Of A Come-Back

Lost Customer Opportunity			
Average Hours per R.O.	X		
	=	0.0	
Effective Labor Rate	X	$ 161.66	
Lost Labor Sales	=	$ -	(A)
Service Department Gross Profit % (Excluding Sublet)	X	80.54%	
Lost Labor Gross	=	$ -	(B)
Lost Labor Sales		$ -	(A)
Parts / Labor Ratio	X	0.92	
	=	$ -	
Parts Dept Gross Profit % R.O.Sales	X		
Lost Parts Gross	=	$ -	(C)
Lost Labor Gross		$ -	(B)
Lost Parts Gross	+	$ -	(C)
Total Lost Gross	=	$ -	