

AMI Management Feature: **Part Two of a Two-Part Series**
AutoInc.

How to Hit Your KPIs, Part 2

By W. Scott Wheeler

Gross Profit leads to Net Profit

The ratio of sales profits against what it took to produce those sales yields an important number: your Gross Profit Margin. I like to remember it this way:

$$\text{SALES} - \text{COSTS} = \text{GP (Gross Profit \$)}$$

$$\frac{\text{GP}}{\text{S}} = \text{GPM (Gross Profit Margin \%)}$$

S

$$\frac{\text{NP}}{\text{S}} = \text{NPM (Net Profit Margin \%)}$$

S

Operating Expenses

As shown on a standard income statement, all of your operating expenses are itemized in a standardized format. One thing I prefer to see, so as to yield better measurement, is to NOT insert your production technician's labor costs in this area. If your shop provides benefits, in addition to standard payroll taxes, these can be listed within the Operating Expenses category. The TOTAL expense of production technician labor will be titled Loaded Technician Costs, meaning the total costs you're bearing for that production technician. Because labor is generally about 50 percent of your overall sales, the costs should be carefully monitored. By the way, the bottom-line cost for a production technician, or Loaded Tech Cost, includes *everything* that tech is costing you, including applicable taxes, insurance, uniforms, unemployment insurance, health benefits, vacations, holidays, training, etc.

What's left over: "Your Net"

The net profit is truly the bottom line. This is what you'll have to carry over into next month, next year, and one day, retirement. Many businesses struggle to yield a net profit of only 5 percent or 6 percent! While there is some disagreement amongst management consultants, it is believed that 15 percent is a good minimum net profit.

Some important benchmarks for the auto repair shop

- A good production technician should produce somewhere in the neighborhood of \$10,000-\$12,000 labor sales per month; he should also produce approximately \$20,000-\$22,000 gross sales per month (notice the 50/50 split of labor to parts).

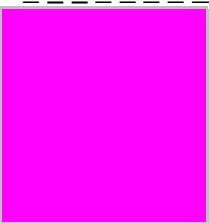
- Technician labor is not to exceed (NTE) 25 percent of shop labor rate.

NOTE: Compute as Tech Salary X 1.25 (to adjust for taxes and such)

- Total Labor Expenses NTE 25% of Gross Sales

- Cost of Goods Sold (COGS) should max out @ 25 percent of Gross Sales. If it's more, then your prices are too low.

<p>BOB'S GARA GE</p>	<p>INCOM E STATE MENT SHOWI NG VARIA NCE DOLLA RS</p>					
-------------------------------------	--	--	--	--	--	--

	<p>Analysis covers: Jan. 1-Dec. 31, 2005</p> <p>The numbers below contains 12 months of actual financial data that has been calculated to reflect financials</p>	<p>No. of Months in Source Financials</p>	<p>12</p>	
---	---	--	------------------	--

over a 12-
month
period.

SALES **_Profit Margin_** **Bench Marks** **_Percent Variance_** **Dollar Variance** **_**

Labor \$182,40

Sales 0

Labor

Cost \$79,215

Labor Gross Profit **\$103,185** **_56.57%_** **_65.00%_** **-8.43%_** **\$** **(15,375)** **_**

Parts \$198,00

Sales 0

Parts \$146,40

Cost 1

Parts Gross Profit **\$51,599** **_26.06%_** **_40.00%_** **-13.94%_**

\$

(27,601) **_**

Sublet

Sales \$38,791

Sublet

Cost \$31,033

Sublet Gross Profit **\$ 7,758** **_20.00%_** **_25.00%_** **-5.00%_** **\$** **(1,940)** **_**

Shop

Supplies

/

Hazmat/ \$

Other -

Sales

\$

Cost

-

Supplies Margin \$ - _0.00%_50.00%_-50.00%_ \$

-

Total \$419,19

Sales 1

Total

Cost of

Goods

Sold \$256,64

(COGS) 9

Total Gross Profit \$162,542 _38.78%_49.49%_-10.71%_ \$

(44,916)_

TOTAL

OPERA

TING

EXPEN

SES

(TOE)

Total Operating Expense \$153,436 _36.60%_35.00%_-1.60%_ \$

(6,719)_

Net Profit \$ 9,106 _2.17%_14.49%_-12.32%_ \$

(51,635)_

MARGINS

Not until we begin to establish relevance between the numbers and provide some ratios, called margins, can we start to see a picture.

BENCHMARKS

Then, we introduced the industry standard benchmarks. Be aware, that at the time of this writing, these benchmarks are beginning to climb upward for a variety of reasons affecting the automotive repair shop. So, these benchmarks are, if anything, on the low side.

PERCENT VARIANCE

Now we begin to see some real interesting information come to life. Bob's sales and cost to produce those sales yields a margin in each of his categories such as labor, parts, and so on. Then, compared against the benchmarks, we can see how well he's doing. Now, we see how much his numbers vary against the benchmarks. Bob certainly has much work to do.

PERCENT VARIANCE DOLLARS

The introduction of this column shows us clearly just how much money Bob's Garage is losing in each of the key areas. Losses of over \$47,000 on the front end, combined with operating expenses that are 1.6 percent high, result in total losses of almost \$54,000. If Bob truly hopes to increase his salary, he'd better start to get these numbers in line.

Increasing sales – Myth No. 1 explained

We've all heard other's good news, usually shouted loudly: "*Our sales are at an all-time high!*"

Yeah, yeah, tell someone else who cares, we're thinking to ourselves. But, aren't increased sales the way toward wealth, power, fame, money and pretty girls? No, not necessarily. Yes, maybe. So, which is it? Well, let me illustrate my point here. Let's suppose Bob's Garage had these numbers for his shop in the previous operating year. Bob's Garage corporate goals and objectives stated a desire for sales growth of more than 19 percent in his next operating year. Let's look carefully at the "bottom line," the lowest right-hand number, showing a 19.3 percent increase to the net operating profit.

Bob's Garage (38.77% GPM)
Income Statement (Previous Year)
With 19.3% Increase in Sales

Description	\$\$	% of Sales	19.3 % Increase
Gross Sales	419,191	100	500,095
Cost of Sales	256,649	40	301,182
Gross Profit	162,542	60	193,913
Expenses	153,436	37	183,049
Net Profit	9,106	23	10,863

So, a 19.3% increase in sales nets us a whopping \$1,757 more profit. Wow! What am I gonna do with all that money?

Note: To calculate each number, expressed as a PERCENT OF SALES, do the following:

To find the number of EXPENSES, PERCENT OF SALES, take

$$\$419,191 \text{ divided by } \$153,436 = 2.73$$

Then, divide this number into 100

$$100 \text{ divided by } 2.73 = 36.63, \text{ rounded up gives } 37\%.$$

SO, your total operating expenses take up 37 percent of your sales, whether you

make \$1 or \$1 million.

Target Practice – How to Achieve Gross Sales Targets

Let's have a closer look at what it would take to grow your business by increasing your sales. To be sure, there are a lot of common myths surrounding this concept. Perhaps the most common is to raise the shop's existing labor rate. This is sure to increase total revenue, isn't it? Well, maybe yes, maybe no. Here we go with the ambiguity again. In theory, it should, *all else being equal*. Below are just a few examples to increase gross sales:

Charge more per hour

Get more done per hour

Sell more parts

Sell more service

Charge for shop supplies

Charge for hazardous materials

Increase your car count

Raise the average dollar sale per repair ticket

Sell services you haven't before

Open your shop earlier

Close later

Open shop on Saturdays (if you aren't already)

Open shop on Sundays

Keep your shop open 24 hours per day

Give up your life, and never go home

You must first understand what you have before you can understand what you need

In most every instance that I've asked shop owners, "What are your potential total sales?" I hear some unrealistic number, either way high, or way low. So, let's take a look at Bob's Garage again, and see what his shop **should be capable of generating in total sales.**

TECHNICIAN PRODUCTIO N CAPACITY @ 100%				
---	--	--	--	--

**BOB'S
GARAGE**

LABOR STATISTICS	Summary: Work days per month in 2005
If shop labor rate per hour is: \$60	January 23.5
And, you have this number of techs: 2	February 22.0
And, your shop opens at what time M-F? 7 a.m.	March 25.0
And, your shop closes at what 5 p.m.	April 23.5
	May 24.0
	June 24.0

time M-F?

And, your techs
take this much
time for lunch

60 minutes

And, your shop
opens at what
time Saturday?

7 a.m.

And, your shop
closes at what
time Saturday?

12 noon

And, your techs
take this much
time for lunch

60 minutes

You have this
many hours per
tech per day

9

Then, your
billable hours
daily are:

18

With 286.5
available work
days, your total
billable labor
hours are:

5,157

July 23.5

August 25.0

September 24.0

October 23.5

November 24.0

December 24.5

2005 Work

Days: **286.5**

*Note: Saturday
= 0.50 Day*

Sales per bay \$154,710

SHOP STATISTICS	
Number of Bays	4
ANNUAL NUMBER OF REPAIR ORDERS (CAR COUNT)	1,677
You will have this many business days in 2005:	286.5
YOUR POTENTIAL SALES CAPACITY	
Daily labor sales capacity	\$1,080
Daily parts sales capacity	\$1,080
Daily total sales capacity	\$2,160
Annualized sales capacity	\$618,840

Current Gross 38.78%

What is an "Effective Labor Rate"?
An Effective Labor Rate is a calculation showing the efficiency ratio of actual sales to total sales potential.
What is <i>your</i> Effective Labor Rate?
- You have two techs
- Generating \$182,400 in Labor Sales, - Over 5,157 available billable hours. With a total sales of \$182,400 over

Profit Margin		5,157 hours, your effective hourly rate is \$35.37	
Current Gross Profit dollars	\$239,956		
TOE	\$153,436		
TOTAL NET INCOME	\$86,520	BOB'S GARAGE Effective Labor Rate: \$35.37/hr	

Why increasing your labor rate doesn't accomplish everything

In this next example, we'll see everything else exactly the same as the last chart. Same parts/labor split, same shop, same number of technicians, and the same goal – to hit \$500,000+ in Gross Sales. Except now, we're going to change our labor rate from \$60 to \$65 per hour. Let's take a look at what happens:

Now, we only need to sell 1.99 more labor hours per day
And, each of the two technicians need only produce .99 more per day

So, you're telling me, that to take my business from \$419,191 gross to \$500,000 I only have to raise my labor rate from \$60/hr to \$68/hr, and my techs only have to crank out just about one hour per day more than usual? Hmmmm. Well, again, there's more to it than that.

**BOB'S
GARA
GE**

**Sched
ule to
achiev
e
Gross
Sales
Target**

**SCEN
ARIO
CHAN
GE
LABO
R
RATE**

**Chang
e
Labor
Rate
To:**

_____ \$68 _____

	toward sales?		
	LABOR		
	contributes		
	what		
	toward sales?	47.9%	

Your New Shop Labor Rate is:

\$68

Number of Technicians:

2

Gross Sales for Previous:	TOTAL SALES	TARGET SALES NEXT	% INCREASE NEEDED	TOTAL SALES NEEDED	PARTS SALES NEEDED	LABOR SALES NEEDED		
					-			
_YEAR:	_\$419,191.00_	_\$500,000.00_	19.28%_		\$80,809_	\$42,061_	\$38,748_	
	AVG/QUARTER:		\$104,7 97.75	\$154,7 10.00	19.28%	\$20,20 2	\$10,51 5	\$9,687
	AVG/MON		\$34,93 2.58	\$51,57 0.00	19.28%	\$6,734	\$3,505	

TH:							\$3,229
AVG/ WEEK:	\$8,061.	\$11,90					
K:	37	0.77	19.28%	\$1,554	\$809	\$745	
AVG/ DAY:	\$1,463.	\$2,160.					
	14	00	19.28%	\$282	\$147	\$135	

Additio nal BILLA BLE labor hours needed DAILY to hit target:	1.99						
Additio nal BILLA BLE labor hours needed PER TECH DAILY	0.99						

**to hit
target:**



SCENA RIO WITH INCREA SED CAR COUNT							
--	--	--	--	--	--	--	--

**BOB'S
GARAG
E**

Your Current Statistics :		
---	--	--

Car
Count or
Repair
Orders
Per Year

1,677

Number
Of
Operating
Days Per
Year

286.5

Car
Count or
Repair
Orders
Per
Operating
Day

5.9

Current
Gross
Sales

\$419,19

1

Current
Average
Sale Per
Ticket

\$250

**Target
Statistics**

:			
Gross Sales Target		\$500,000	
Target Car Count Needed Annually	2,000		
Target Car Count Needed Daily	7.0		

You have an increased sales target. Could a price increase, instead of car count increase,							
--	--	--	--	--	--	--	--

help meet this target?							
------------------------------	--	--	--	--	--	--	--

OPTION

S:

If average
sale per
ticket
were
increased
by:
then your
average
sale per
ticket
would be
\$299.96
and then
you
would
only need
1,667
cars
annually

20%

b

To hit
your new
sales
target of
\$500,000,
an

increase				
of				
19.28%				
...				
You can				
increase				
your				
average				
ticket				
price by				
\$50 or				
20%				
and you				
would				
need to				
decrease				
your car				
count by				
10 cars.				

But what is all the noise I hear about increasing car count? Won't THAT get me to my goal quicker? Take a look at this example, and you tell me. If you're currently working on around six cars per day (5.9) at an average repair order ticket of just \$250 each, you would have to bring in about one more car per day. That's really not difficult and, as the math shows above, will get you to your target objective of \$500,000+ per year gross sales. But, what else can you read into the chart above?

Decreasing costs – Myth No. 2 explained

Now, let's look at the second most popular "way to make it," by cutting your operating expenses. Yes, it's true that your shop's operating expenses had better be in line, or not much is gonna be left at the end of the month. However, as we look at the exact same numbers that Bob's Garage gave us for the last evaluation, you'll begin to

understand some things. In our example below, the only numbers that are changing are the lower two figures in the far-right column as well as the percent to sales just next to it.

**Bob's Garage 50% Increase Net
Income Statement Previous Year
With 3% Decrease in Expenses**

Description	\$\$	% of Sales	3% Decrease
Gross Sales	419,191	100	419,191
Cost of Sales	256,649	40	256,649
Gross Profit	162,542	60	162,542
Expenses	153,436	34	148,833
Net Profit	9,106	26	13,709

So, what did we gain by working so hard at cutting back on operating expenses? We quit wearing uniforms, because that was too costly. We reuse copier paper, we turned out the lights in the shop, we don't have those company-paid lunches anymore, we quit paying that expensive alarm service, and we put off buying that much-needed piece of diagnostic equipment. But heck, we've cut back by a whole 3 percent! What did we get for all that? A measly \$4,603 more profit, that's what. While we're discussing expenses, now is the time to introduce more benchmarks: shop expenses.

Controlling your shop expenses

Yeah, OK, we've been hearing this for ages – you'd better budget! While a budget, essentially a control put on what you spend, can be a good thing, it's *not quite* going to give us the return we're looking for. However, it is very important to know where your expenses should fall in line. Very much like your "income to debt ratio" that lenders use to find out just how healthy you are.

These are important benchmarks **as measured against gross sales!**

20% PARTS EXPENSE

Money paid to parts suppliers, exclusive of additional inventory purchases. This should not be more than approximately 21 percent of the total gross sales.

How to figure percentage:

EXAMPLE:	PARTS COST	<u>\$ 8,000</u>
	GROSS SALES:	\$ 40,000

$$= .2 \text{ (20\%)}$$

If it's 25 percent or higher, you need to raise the selling price of your parts.

NOTE: used to determine if your matrix parts pricing is in line.

25% LABOR EXPENSES

Production people/direct labor only; i.e., techs, parts people, drivers, shop cleanup, etc.

Should be approximately 25 percent loaded (all payroll taxes and benefits included).

NOTE: Indicator of overpaying people, or too many people on board.

10% ADMINISTRATIVE SALARIES

Service writer, clerical labor. Should be approximately 10 percent of Gross Sales or less (much less).

35% OPERATING EXPENSES

This should not exceed approximately 35 percent. If it does, you will need to find ways to cut back. Do not include any cost of direct labor.

10% ADVERTISING EXPENSES

Advertising expenses NTE 8 percent to 10 percent of total gross sales.

100% TOTAL

Increasing Gross Profit Margin – why it’s the real choice

This is also known as “more bang for your buck.” When we studied the impact of the previous two scenarios, we can clearly see what our Return On Investment (ROI) will be. In the first example, there will be a heavy investment of time, effort, advertising, etc. to give us an increase in sales of 19.3 percent. Yes, we DID see an increase in total net profit of a little shy of \$1,800, which is a small return on your investment. In Scenario 2, decreasing expenses by 3 percent, we saw a return of \$4,603, a larger return. But look what you had to give up! In this final scenario, you’ll quickly see that study of your Gross Profit Margin will provide the highest return for your investment. Let’s take a look:

**Bob’s Garage 89.2% Net
Income Statement Previous Year
With Increase in Gross Profit Margin
of 5%**

Description	\$\$	% of Sales	5% Increase
Gross Sales	419,191	100	419,191
Cost of Sales	256,649	40	256,649
Gross Profit	162,542	60	170,669
Expenses	153,436	37	153,436
Net Profit	9,106	23	17,233

The only numbers that have changed here are those in the boxes. We can see a dramatic increase in the gross profits, and the effect it has on your bottom line – an increase of \$8,127! Now **that's a good return on your investment.** But an investment of what? What do you really need to do to achieve a better GPM? Well, anything that has to do with sales, and the costs to produce those sales, such as:

Smarter parts purchases

Quality control of work performed, less comebacks

Better, more efficient equipment

A service writer who has a higher close ratio

Better facility management

Anything affecting the sale and costs to produce that sale

And **MOST IMPORTANTLY, PRODUCTION EFFICIENCY**

W. Scott Wheeler, president of Automotive Consultants Group Inc. (ACGI) is a shop management expert in the transportation industry, with more than 36 years of experience in the automotive, trucking, heavy equipment, marine, motor sports and defense aerospace industries. He holds numerous ASE credentials, including two master's certifications. He has experience working in every position from tech to fixed operations director to mechanical engineer. Wheeler has authored four books for the automotive industry. He continues to write, consult and speak professionally at major industry events throughout the U.S. and Canada. He can be reached at scott@automotiveconsultantsgroup.com.

Understanding the Labor Rate

I'm still amazed at how many shops determine their own labor rate based upon what other shops around them are doing. While this might seem to make sense at first, it's not the right way to do it. After all, is the shop across the street from you exactly like yours? Do they have the same overhead? Administrative expenses? Shop size? Do they work on the same type of cars as you? Do they provide specialty work like your shop does? Truly, there are too many variables that exist between shops, and it makes no sense that you set your rate comparable to theirs. Your labor rate should be set based directly upon your operating costs, and more specifically, your technician production labor cost. Make sure you don't forget to calculate taxes, insurance, benefits, uniforms, and anything else you provide that costs you money. Just like determining the profit margin you need to derive on your parts, so should you calculate what margin to hit on your labor. A thorough understanding of your shop's income statement will allow you to calculate your shop labor rate. Further, your rate should be set so as to achieve the desired gross profit margin. Now, let's take a look at our labor rate chart below.

DON'T BE AFRAID

Several things to note here: *Don't be afraid to charge for what you know*. If you're the only shop around that can repair most any drivability problem, can flash program powertrain control modules, tackle nightmare cars that no one else can, and rewire that burned-up engine bay, then these skills should be taken into account when deciding what's fair to charge your customer.

DON'T DO IT!

Another thing to note: Do *not* post your labor rate on any poster, document, repair order or invoice. Years past, it was common to walk into your local gas station/repair shop, and see a sign clearly stating, "Shop Labor Rate 40/hr." Does your doctor post his labor rate? Of course not, so why should you? *Think about it!*

THE MATRIX

How do we correctly achieve profit targets for your second major source of sales: parts? Let's introduce you to **The Matrix**. Since parts sales are generally about 50 percent of your overall sales, understanding parts pricing is essential to your profitability. Parts come in all sizes, shapes, amounts and, especially, costs. If you purchase a pack of fuses from a jobber, and then in turn sell each fuse one-at-a-time, what do you think a fair profit should be? Likewise, if you purchase a GM crate motor for a customer, do you really think you can charge a 100 percent markup (double what you paid) and get away with it? It is for these reasons that shops should use some type of matrix, usually the shop owner's own design, or perhaps built into his management software. Software designers understand the need for some type of matrix, and most have this feature available to simplify your day-to-day parts pricing tasks.

Shop productivity explained

We'll show you here the importance of understanding the basics of shop productivity and how dramatic the impact is to your business. First, a few definitions:

Flat Rate Hours (FRH): Those hours billed to the customer, and paid to the tech. This is also known as **BILLABLE HOURS**, which you bill to the customer. This is repeatedly shown as almost exactly one-half of your sales income!

Operating Hours (OH): The actual hours your shop is open for business

Clock Hours (CH): Those hours that your tech is actually clocked in. Just because your shop is open (OH) doesn't mean he is there working! Remember all the times he's called in sick?

Hours actually spent on the job, or Actual Time (AT): If a water pump job should flat rate at 1.5 hours, according to whatever labor time guide you use, then this is the FRH. If the technician is really good, and experienced in this repair, hopefully he can "beat flat rate." This would mean he would complete this job in less than 1.5 hours. If, however, he

is not experienced in this repair, he might take 2 hours to complete the job. This is the ACTUAL TIME spent to perform the repair.

PRODUCTIVITY: *adj. Producing or capable of producing*

This is simply a measurement of two things: Flat Rate Hours (book time), divided by the hours it took the tech to perform that job (and *only* that job) and looks like this:

$$\text{PRODUCTIVITY} = \frac{\text{FRH}}{\text{AT}}$$

EFFICIENCY: *The ratio of the effective or useful output to the total input.*

This is a measurement of what a tech can produce while your shop is open for business, and looks like this:

$$\text{EFFICIENCY} = \frac{\text{AT}}{\text{OH}}$$

PROFICIENCY: This is a measurement of the billable hours a tech can produce while your shop is open for business, and looks like this:

$$\text{PROFICIENCY} = \frac{\text{FRH}}{\text{OH}}$$

Effective labor rates and how to calculate

When you begin to introduce menu pricing into your shop (and you should), you have to take into consideration the effect those jobs will have on your income statement. So, it's a good idea to calculate what the "Effective Labor Rate" will be on these type jobs. Again, a canned or menu-priced job can be almost anything that you perform routinely – tuneups, brake jobs, oil changes, alignments with inspections, cooling system inspections with flush, etc. So, inevitably what happens is that you are performing these jobs at some rate **other than your standard shop labor rate**. The formula below will help you to calculate your effective labor rate on these type jobs.

$$\frac{\text{TOTAL SALES}}{\text{TOTAL LABOR HOURS}} = \text{EFFECTIVE LABOR RATE}$$

Does BOB UNDERSTAND HIS EFFECTIVE LABOR RATE?

Probably not. He says his shop labor rate is \$60 per hour. However, upon closer examination, we'll find it is, unfortunately, much lower. Let's take a look.

Look back at the chart showing **SALES PRODUCTION AT 100 PERCENT CAPACITY**. In this example, for calendar year 2005, Bob's Garage will have 5,157 hours available to bill out to customers. This is a minimum number. It is also a goal. Bob hopes to sell each and every hour available in his "billable labor inventory." In a really efficient shop, they will sell even more than this. But Bob has been struggling with shop production and efficiency issues. Is his shop labor rate truly \$60 an hour? I don't think so. Let's run some numbers and find out. What you'll come up with is \$35.40 per hour. So, now we can see clearly that while Bob may *think* he's getting \$60 per hour, in effect, he's only getting \$35.40 per hour, or just 59 percent of it. Big difference.

Learn where to pull your KPIs from

You will need a comprehensive understanding of where you're going to pull your KPIs from, which this article does not have room to delve into. Suffice to say you'll need a variety of reports from your shop management system, manually generated reports, and – of course – those from your CPA or bookkeeper. Contact me, W. Scott Wheeler @ scott@automotiveconsultantsgroup.com and I'll be happy to assist you.

Make 2015 the year you achieve all your personal and professional goals. Good luck.

Okay, so what happens when we try to achieve our gross sales target by increasing our shop Labor Rate to \$66.37 per hour? Well, as one would expect, we need only produce about 4 more hours per day, just slightly less than if we adjusted our rate from \$60 to \$64.13 per hour.

But what is all the noise I hear about increasing car count? Won't THAT get me to my goal quicker? Take a look at this example, and you tell me. If we're currently working on around six cars per day (5.9) at an average repair order ticket of just \$250 each, you would have to bring in about one more car per day. That's really not difficult, and, as the math shows above, will get you to your target objective of \$500,000+ per year gross sales. But, what else can you read into the chart above?