# It's All About The Numbers!

# Understanding the Mathematics of Dealership Sales

By Garry House

NCM<sup>®</sup> Institute Center for Automotive Retail Excellence



## **Contents**

EXECUTIVE SUMMARY	1
SALES MATHEMATICS FOR VARIABLE OPERATIONS	2
Basic math	2
Advanced Math	3
The 4 Primary OTDB Categories	3
1 <sup>st</sup> Time "Walk-Ins"	
Inbound "Blind" Phone OTDBS	6
Internet OTDBs	7
Lead Sources	7
Website Lead Conversion	
SRPs and VDPs	
Staffing and Lead Management	
Salesperson Pro-Active OTDBs	
Repeats and Owner Rejerrals	
Orphan Owners	
Salespersons' Circle of Influence	
Service Department Prospects	
The "Be-Back" OTDB	14
The Appointment Solicitation Process and Discipline	14
Financial Services Mathematics	14
Sales Department Organizational Considerations	15
SALES MATHEMATICS FOR FIXED OPERATIONS	17
Service Department Sales Mathematics	17
Calculating the Service Department Market Potential	
Calculating Available Labor Hours, Potential Labor Sales, and Potential Gross Profit	18
Calculating Available Inventory of Customer-Paid Labor Hours	20
Customer-Paid Labor Sales - The Math Within The Math	21
Determining the Right Service Advisor Staffing Level	23
Mathematics for the Express Service Center	24
Collision Center Sales Mathematics	26
Calculating Your Collision Center Market Potential	27
Matching Shop Capacity Against Sales Potential	27
Other Important Collision Center Sales Metrics	28
Parts Department Sales Mathematics	28
Back Counter Parts: Sales and Metrics	28
Front Counter Parts: Sales and Metrics	30
Parts Department Sales: Staffing Levels	30
% Margin vs. % Mark-up	32
OVERALL SUMMARY OF DEALERSHIP SALES MATHEMATICS	33
ΔΡΟΙΙΤΤΗΕ ΔΙΙΤΗΟΡ	34

#### **EXECUTIVE SUMMARY**

It's probably because of my college training in Industrial Engineering, but I've always been fascinated and challenged by trying to define any meaningful relationships between "opportunities to do business" (OTDBs) and sales results. After nearly a half-century of experience in the retail automotive business, I've concluded that there truly are consequential metrics associated with selling both vehicles and service at an auto dealership.

You can't expect your key personnel to effectively practice Accountability Management unless they thoroughly understand the principles of sales mathematics.

One example of these metrics is the "closing rate" which we have defined (as long as I've been in the business) as the number of "agreements to purchase" divided by the number of "face-to-face opportunities to do business," expressed as a percentage. Numerous other metrics, for both

Variable and Fixed Operations, are discussed in this report.

Before you begin reading this eReport, I need to clarify your expectations. *The content that follows does not discuss the metrics related to Gross Profit, Expenses, Profitability, or Balance Sheet Management...only Sales*. Metrics for the other important areas of dealership management will be discussed in future reports and articles.

At NCM<sup>®</sup> Institute (NCMi<sup>®</sup>), everything we teach dealership managers is positioned under the "6 Elements of Effective Accountability Management" (see Figure 1). You can't expect your key personnel to effectively practice Accountability Management unless they thoroughly understand the principles of sales mathematics.

This report contains many illustrations of Microsoft Excel worksheets. These worksheets are available for your own data input; just follow the links embedded in the Figures throughout the report.

# THE PRIMARY ELEMENTS OF EFFECTIVE Accountability Management

- > Plan your work, and work your plan!
- > Clearly define and communicate your expectations.
- ➤ Measure what you intend to manage!
- ➤ Inspect what you expect!
- > Reward positive results, and respond appropriately to negative results! (Positive behavior that is rewarded will be repeated; and negative behavior that is not effectively addressed will, likewise, be repeated.)

FIGURE 1.

#### **Sales Mathematics for Variable Operations**

#### BASIC MATH

The relationships between the primary metrics of selling new and used vehicles haven't really changed

much over the last four decades. The dealer's

expectations of an average sales consultant are pretty much the same today as they were in the early 1970's. Most dealers want to see their average sales person a) deliver 10 units per month and b)

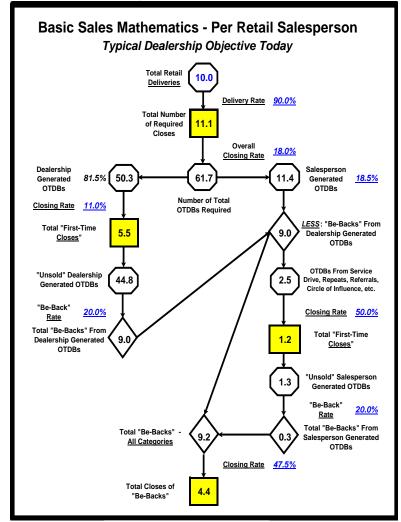
Most dealers want see their average salesperson a) deliver 10 units per month, and b) provide approximately half of those units through his/her personal business development.

provide approximately half of those units through

his/her personal business development.

Figure 2 displays the typical relationship of metrics required to achieve both of these objectives. In summary. here's how the math is supposed to work:

- 1. In order to deliver 10 units per month, with a 10% "fall-out" rate (finance problems, buyer's remorse, found better deal, non-aggressive spot-delivery culture, etc.), the salesperson must have approximately 11 managementverified "closes."
- 2. At an 18.0% overall closing rate (which is certainly realistic



3. These OTDBs come from two sources. As displayed in Figure 2, nearly 20% of the OTDBs should be "Salespersongenerated"; the remainder of the OTDBs (approximately 80%) will be "Dealershipgenerated" (1st time walk-ins, inbound phone inquiries, and Internet leads generated by advertising, reputation, location, drive-byes, etc.)

- 4. Dealershipgenerated OTDBs should close (during the 1st interaction) at above a 10% rate, but probably below 15%. Figure 1 uses an 11.0% 1st time close rate to produce 5.5 closes, or approximately half of the salesperson's business.
- 5. The remainder of the required closes (also approximately 5.5) must be Salespersongenerated, and the vast majority of these will come from "be-backs" (assuming that both management and the salesperson adopt a disciplined culture of intelligent and consistent follow-up). All other Salesperson-generated OTDBs and closes must be sourced from repeat

FIGURE 2. with good sales processes and accurate traffic management), the salesperson must interact with slightly more than 60 opportunities to do business (OTDBs) or "UPS" (as they're commonly referred to) per month.

business, referrals, the salesperson's personal circle of influence, and prospects developed by the salesperson through direct interaction with the Service Department and Body Shop.

It's important to recognize that, when viewing these basics, the relationship of metrics for a veteran salesperson delivering 15-18 units per month will be significantly different than a rookie salesperson delivering 5-8 units per month.

#### **ADVANCED MATH**

The metric relationships in this section not only consider the recent changes in the industry (impact of the Internet, advent of the BDC, utilization of CRMs, etc.), but they also consider the specific categories within the Salesperson-generated OTDB business segment. You will soon understand why we have differentiated "basic" and "advanced" in this report.

# The 4 Primary OTDB Categories

We begin this "advanced math" section by looking at OTDB's in four primary categories. However, since

the metrics are different for both new and used, the four categories quickly turn into eight categories, as displayed in Figures 3a and 3b.

Why are the metrics different between new and used vehicle customers? To begin with, new vehicles are certainly more of a commodity.

You can buy a new 2011 Lincoln MKS at numerous franchised Lincoln dealerships, but you can only buy that 2007 Town Car with 23,000 miles previously owned and operated by Mary Smith at ABC Motors. Also, the used vehicle

prospect responds to advertising and shops differently than the new vehicle customer, and these patterns significantly impact the metric relationships. A number of dealerships today, particularly those in the public ownership sector, spend at least as much time focused on their traffic management metrics as they do on the numbers on their financial statements.

Thus, dealers who take traffic management seriously utilize measuring tools like those displayed in Figures 3a and 3b to forecast and track, regularly throughout the month, the 8 (new and used) OTDB categories on a M-T-D basis.

#### 1<sup>st</sup> Time "Walk-Ins"

It is first important to understand the definition of this category. Normally, prospects in this OTDB group have never done business with, or tried to do business with the dealership. Therefore, these prospects do not have a relationship with the dealership, nor with any dealership managers, salespeople, or other employees at the store. They "show up" at the door (or on our display lots) because of our advertising, our reputation, our dealership's physical appearance, our location, or because they just simply drove by. Most of these prospects have already shopped, or intend to shop, at least two other dealerships. Unfortunately in most dealerships, this OTDB category receives the greatest

focus by both sales managers and sales consultants. This tends to be a cultural issue in many stores, because neither the managers nor salespeople are trained or disciplined in

"activities management." Years and years of a great automotive retail business climate have conditioned our sales teams to "come to work to wait", rather than "coming to work to work." Activities management was not a necessary discipline when the "UP Bus" was regularly arriving, full of eager prospects, at the

showroom door.

Years and years of a great automotive retail business climate have conditioned our sales teams to "come to work to wait," rather than "coming to work to work." Activities management was not a necessary discipline when the "UP Bus" was regularly arriving, full of eager prospects, at the showroom door.

A number of dealerships today, particularly

least as much time focused on their traffic

on their financial statements.

those in the public ownership sector, spend at

management metrics as they do on the numbers

In today's auto retail business world, most dealers make a reasonable attempt at recording,

measuring, and inspecting the overall metrics in this OTDB category. However, very few dealers separate their metrics by new and used vehicles, although it's important to do so. Philosophically, you should "record everything, and purify later." The metrics that need to be accurately recorded, by new and used are as follows:

- Number of 1st time walk-ins
- Number of closes (management verified)
- Number of deliveries

# **Opportunity (OTDB) Statistics**

N	ew Vehicle Sales Production Management	Date:	Monday, Ma	ay 23, 2011
		_	Total	Gone
	Number of Sellin	g Days	<b>27</b>	20
		MTD	Pace	Target
	Number of Department Sales Consultants	4	4	7.0
	Pro-Active Appointments (#1) Per Consultant	6.5	8.8	14
1	Number of Salesperson-Proactive OTDB's	26	35	98
	(Total "Appointments <u>SET</u> " From This Source, Not Including Those Generated By Inbound-Telephone or Internet - Includes Be-Backs, Repeats, Referrals, Circle of Influence, Bird-Dog Referrals, Orphan Owners, Visiting Owners, Service Drive, etc.)			
а	Appointments Confirmed From This OTDB Source	19	26	88
b	Confirmed Percentage From This OTDB Source ("1a" / "1")	73.08%	73.08%	90.00%
С	Appointment "Shows" From This OTDB Source	17	23	66
d	"Show" Percentage From This OTDB Source ("1c" / "1a")	89.47%	89.47%	75.00%
е	Deliveries From This OTDB Source	10	14	33
<b>e</b> 1	Delivery to "Show" Percentage	58.82%	58.82%	50.00%
f	Delivery Percentage From This OTDB Source ("1e" / "1")	38.46%	40.00%	33.67%
2	Number of Inbound "Blind" Telephone OTDB's	77	104	100
а	Appointments Set From This OTDB Source	30	41	40
b	Appt. Percentage From This OTDB Source ("2a" / "2")	38.96%	38.96%	40.00%
С	Appointment "Shows" From This OTDB Source	18	25	20
d	"Show" Percentage From This OTDB Source ("2c" / "2a")	60.00%	60.00%	50.00%
е	Deliveries From This OTDB Source	10	14	10
<b>e</b> 1	Delivery to "Show" Percentage	55.56%	55.56%	50.00%
f	Delivery Percentage From This OTDB Source ("2e" / "2")	12.99%	13.46%	10.00%
3	Number of Internet OTDB's	72	97	150
а	Appointments Set From This OTDB Source	24	32	53
b	Appt. Percentage From This OTDB Source ("3a" / "3")	33.33%	33.33%	35.00%
С	Appointment "Shows" From This OTDB Source	11	15	27
d	"Show" Percentage From This OTDB Source ("3c" / "3a")	45.83%	45.83%	50.00%
е	<b>Deliveries From This OTDB Source</b>	8	11	18
<b>e</b> 1	Delivery to "Show" Percentage	72.73%	72.73%	65.00%
f	Delivery Percentage From This OTDB Source ("3e" / "3")	11.11%	11.34%	12.00%
4	Number of 1st Time "Walk-In" OTDB's	53	72	75
	(Prospects That Are Generated Through Advertising, Location, Display, Drive-By, Reputation, etc. Theoretically, we have never done business with this group of OTDB's.)			
а	Deliveries From This OTDB Source	11	15	8
b	Delivery Percentage From This OTDB Source ("4a" / "4")	20.75%	20.75%	10.00%
5	Total Number of OTDB's - All Sources	228	308	423
а	Total Deliveries From All OTDB Sources	39	54	69
b	Delivery Percentage From All OTDB Sources ("5a / "1")	17.11%	17.53%	16.31%

FIGURE 3A.

	Opportunity (OTDB) Statistics					
	Used Vehicle Sales Production Management		Monday, Ma			
		· _	Total	Gone		
	Number of Sellin	g Days	27	20		
		MTD	Pace	Target		
	Number of Department Sales Consultants	7	7	9.0		
	Pro-Active Appointments (#1) Per Consultant	5.4	7.3	12		
1	Number of Salesperson-Proactive OTDB's	38	51	108		
	(Total "Appointments SEI" From This Source, Not Including Those Generated By Inbound-Telephone or Internet - Includes Be-Backs, Repeats, Referrals, Circle of Influence, Bird-Dog Referrals, Orphan Owners, Visiting Owners, Service Drive, etc.)					
а	Appointments Confirmed From This OTDB Source	30	40	97		
b	Confirmed Percentage From This OTDB Source ("1a" / "1")	78.95%	78.95%	90.00%		
С	Appointment "Shows" From This OTDB Source	15	20	78		
d	"Show" Percentage From This OTDB Source ("1c" / "1a")	50.00%	50.00%	80.00%		
e	Deliveries From This OTDB Source	10	13	47		
e1	Delivery to "Show" Percentage Delivery Percentage From This OTDB Source ("1e" / "1")	66.67% 26.32%	66.67% 25.49%	60.00% 43.33%		
$\binom{1}{2}^{f}$			119	125		
	Number of Inbound "Blind" Telephone OTDB's	88				
l a	Appointments Set From This OTDB Source Appt. Percentage From This OTDB Source ("2a" / "2")	42.05%	42.05%	75		
C	Appointment "Shows" From This OTDB Source	20	27	60.00% 41		
d	"Show" Percentage From This OTDB Source ("2c" / "2a")	54.05%	54.05%	55.00%		
e	Deliveries From This OTDB Source	14	19	23		
e1	Delivery to "Show" Percentage	70.00%	70.00%	55.00%		
f	Delivery Percentage From This OTDB Source ("2e" / "2")	15.91%	15.97%	18.40%		
3	Number of Internet OTDB's	12	16	20		
а	Appointments Set From This OTDB Source	4	5	10		
b	Appt. Percentage From This OTDB Source ("3a" / "3")	33.33%	33.33%	50.00%		
С	• •	3	4	6		
d	"Show" Percentage From This OTDB Source ("3c" / "3a")	75.00%	75.00%	60.00%		
е	Deliveries From This OTDB Source	3	4	4		
e1	Delivery to "Show" Percentage	100.00%	100.00%	65.00%		
L f	Delivery Percentage From This OTDB Source ("3e" / "3")	25.00%	25.00%	20.00%		
4	Number of 1st Time "Walk-In" OTDB's	73	99	125		
	(Prospects That Are Generated Through Advertising, Location, Display, Drive-By, Reputation, etc. Theoretically, we have never done business with this group of OTDB's.)					
а	Deliveries From This OTDB Source	12	16	19		
b	Delivery Percentage From This OTDB Source ("4a" / "4")	16.44%	16.44%	15.00%		
5	Total Number of OTDB's - All Sources	211	285	378		
а	Total Deliveries From All OTDB Sources	39	52	93		
b	Delivery Percentage From All OTDB Sources ("5a / "1")	18.48%	18.25%	24.55%		

FIGURE 3B.

As previously mentioned, this OTDB category typically closes at between 10% and 15%, most often much higher for used vehicles because of the uniqueness of the product.

Can these closing rates be improved upon? Absolutely! However, there are two strategies that must be developed, implemented, and executed by the sales team.

1. The sales team must understand that, since research shows that at least 80% of automotive shoppers have investigated the Internet, every 1st time "walk-in" prospect must be treated as an Internet shopper. The odds of success are far out of favor for our sales team to assume that any of these prospects have not researched the Internet. Because of the Internet, this group of

prospects is highly informed about our product (and maybe about us, as well) and, at least for the moment, our vehicle and our

dealership is on their shopping "short list." So from the time the customer accesses our dealership facilities by entering our driveway, we must begin to provide a number of "WOW!" factors that differentiate us from our competition.

We have all heard of (or personally experienced)

listening to recorded phone calls. It doesn't have to be that way! A continual telephone sales

measurement of the metrics and accountability for

the nightmares about mystery shopping and

training program, coupled with accurate

expectations, will yield impressive results.

2. The second strategy that must be developed, implemented, and executed is what we at NCM® describe as "Value Selling." This concept involves creating and training a "Unique Selling Proposition" (USP) for our new and used vehicle departments. The USP clearly defines the advantages of doing business with our dealership and its specific departments. The NCM training and consulting teams have had great success assisting client-dealers in implementing processes to "First and Foremost, Sell Value" and "Replace Negotiation with Documentation."

NCM client-dealers who consistently and effectively execute these two critical strategies enjoy closing rates upward of 20% on 1<sup>st</sup> time walk-ins.

NCM client-dealers who consistently and effectively execute these two critical strategies enjoy closing rates upward of 20% on 1<sup>st</sup> time walk-ins.

#### **Inbound "Blind" Phone OTDBS**

This group of OTDBs is defined as those prospects who call into the dealership, and ask for "New cars, please," or "Used cars, please," and do not request to speak with a specific individual within our sales department. Without question, this OTDB category is the most difficult to measure and manage. However, there is current technology available to improve the accuracy of tracking these important metrics, assuming that sales management understands and

practices the required disciplines. We have all heard of (or personally experienced) the nightmare results of mystery shopping and listening to recorded phone calls. It doesn't have to be that way! A continual telephone sales training program,

coupled with accurate measurement of the metrics and accountability for expectations, will yield impressive results.

The metrics for blind phone OTDBs that need to be accurately recorded, by new and used, are as follows:

- 1. Number of phone inquiries
- 2. Number of appointments set
- 3. Number of appointments confirmed (by a 3rd party)
- 4. Number of appointments that show
- 5. Number of closes (management verified)
- 6. Number of deliveries

If you have a structured and disciplined training, measurement, and accountability process, the overall mathematical results that you should expect from the blind phone OTDB category are as follows:

- 50% appointments set
- 80% 90% of set appointments confirmed
- 60% of confirmed appointments will show
- 50% of appointments that show will be delivered

These resulting metrics will be slightly higher for used vehicles and slightly lower for new vehicles.

Some dealers are taking these metrics to an even higher level by measuring "Internet telephone OTDBs." These are phone inquiries that can be directly sourced to a phone number that appears on a dealership web page, a manufacturer's web page, or a free or paid 3rd party provider's web page.

#### **Internet OTDBs**

Since the advent of many good Internet Lead Management (ILM) tools, the ability to accurately measure and analyze the metrics for this OTDB category has been greatly enhanced. However, some ILMs still do not effectively differentiate between new and used internet leads. There are several sets of metrics that will affect the ultimate results you achieve from this OTDB category.

#### **Lead Sources**

Close rates will vary significantly by lead source. Following are the approximate overall "delivery rates," by source, that should be expected:

- Dealership Website 15% and above
- Manufacturer Website 10% to 12%
- Manufacturer Leads from 3rd Party Sources 5% to 8%
- 3rd Party New Vehicle Leads 5% to 8%
- 3rd Party Classified Used Vehicle Listings 10% to 12%

The overall dealership's Internet closing ratio will therefore first depend on the mix of leads the store receives from the above lead sources. Secondarily, the closing ratio will depend on the effectiveness of the store's lead management process.

#### Website Lead Conversion

A dealership with an effective website should expect a lead conversion of 5% to 10%.

One important factor that impacts the success of a dealership's Internet success is the relationship of leads generated to the number of visitors to the dealership web site. The website "conversion rate" is defined as the number of attributable electronic leads and telephone inquiries divided by the number of unique visitors to the web site. A dealership with an effective website should expect a lead conversion of 5% to 10%.

#### SRPs and VDPs

Most dealers are heavily invested in the 3rd Party Classified Used Vehicle listing services of Cars.com and/or AutoTrader. Both of these providers make ondemand metrics available to measure:

- # of SRPs (the number of times your vehicle[s] appeared on Search Results Pages viewed by Internet prospects.)
- 2. # of VDPs (the number of times an Internet prospect "clicked" through to your Vehicle Detail Page[s].)
- VDP Conversion Rate (# of DVPs divided by # of SRPs)

Excerpts from sample reports detailing these metrics are shown in Figure 4.

Dale Pollack, president of vAuto, has conducted considerable research on SRPs and VDPs and has concluded that there is a definite correlation between the number of used vehicles retailed by a dealer and the number of VDPs the dealer receives. Pollack's evidence, in fact, proves that for a dealer to retail 100 used vehicles per month, the dealership needs at least 10,000 VDPs in that month.

He firmly believes that, "the number of VDPs is the <u>ONLY</u> metric that matters to justify the check you write every month to AutoTrader and/or Cars.com!"

The NCM training and consulting teams regularly assist client-dealers in implementing and executing strategies to significantly increase both SRPs and VDPs.

Both AutoTrader and Cars.com agree that dealers who employ best practices in managing their 3rd Party Classified Listing strategies will enjoy a VDP conversion rate of between 3% and 5%. Combining the highest (5%) here with Mr. Pollack's metric above, would lead to the following relationship:

#### 100 Retail Units per month

= 10,000 VDPs per month = 200,000 SRPs per month

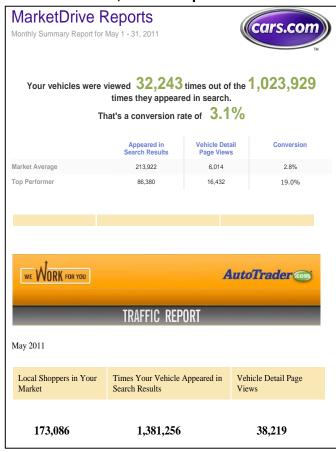


FIGURE 4.

The NCM training and consulting teams regularly assist client-dealers in implementing and executing strategies to significantly increase both SRPs and VDPs.

#### Staffing and Lead Management

The final and, by far, most important metrics for the internet OTDB group relate to the dealership's lead management process. No matter how many internet leads a dealership receives, unless the vehicle sales department is properly staffed and trained and has an effective, disciplined, and consistent internet lead management process, there is little chance of achieving the target metrics we'll be discussing. Let's begin with the recommended staffing guidelines:

- 20 30 internet leads per month for a fulltime combination Internet and Floor Sales Consultant.
- 60 70 internet leads per month for a full-time
   "A-Z" Internet Sales Consultant.
- 125 150 internet leads per month for a fulltime BDC or Internet Appointment Setting Specialist.

The metrics for internet OTDBs that need to be accurately recorded, **by new and used**, are as follows:

- Number of electronic internet leads.
- Number of connections (phone or email conversations)
- 3. Number of appointments set
- 4. Number of appointments confirmed (by a 3rd party)
- Number of appointments that show
- Number of closes (management verified)
- 7. Number of deliveries

If you have a structured and disciplined training, measurement, and accountability process, the overall mathematical results that you should expect from the Internet OTDB category for new vehicles are as follows:

- 50% connection rate
- 80% appointments set
- 80% 90% of set appointments confirmed
- 75% of confirmed appointments will show
- 50% of appointments that show will be delivered

Again, depending on the mix of lead sources, the above resulting metrics should produce an overall closing rate for new vehicles of between 12% and 15%.

The used vehicle internet prospect is a different bird entirely. Not only does he/she rarely submit an electronic lead, this prospect may do anything from calling in on a trackable "800" number, to just showing up and disavowing any knowledge of internet research. Although we recommend using the same measurement methods for used vehicles, unfortunately there is just not enough reliable statistical data to tell you what those metrics should be. We do know, however, that the overall closing rate for used vehicle electronic internet leads is often upwards of 20%.

#### **Salesperson Pro-Active OTDBs**

This major category of OTDBs normally receives the *least* amount of focus by both sales managers and sales consultants. Why? For the same reason that 1<sup>st</sup> time walk-in OTDB's receive the most focus. In most dealerships, the cause is the same "cultural" issue discussed earlier; neither the managers nor salespeople are trained or disciplined in "activities management".

What makes this sad is that, as they said in the movie, <u>Top Gun</u>, "This is a target-rich environment." And what makes it sadder, is that we have a "relationship" with all these OTDBs. In the following pages, we'll discuss these numerous sub-categories of Salesperson Pro-Active OTDBs, together with the

applicable metrics: repeat buyers, owner referrals, orphan owners, "bird dog" referrals, salespersons' circle of influence, service department prospects, and finally and most importantly, unsold prospects.

Dealers, general managers, and sales managers tell us that, when in a face-to-face setting with this group of OTDBs, they will always close at a rate greater than 50%.

#### Repeats and Owner Referrals

One principle that most every veteran 20+ monthly unit producer appreciates and honors is that there are two keys to making big money in the car business ...employment longevity and owner loyalty. As a salesperson's owner base increases, his opportunities to generate repeat and referral business increase exponentially. In fact, these opportunities increase to such a level that many veteran salespeople are not interested in handling 1st time walk-ins, blind telephone OTDBs, or Internet leads.

Figure 5 displays the impact of both repeats and owner referrals over the first five years of a salesperson's career in a non-highline dealership. It is important to recognize that, for the following metrics to apply:

- The dealership's level of sales and service customer satisfaction must be at or above regional and national average,
- The salesperson should have access to, and be well-trained in the use of, an efficient CRM tool, and
- The salesperson is trained and held accountable for executing a disciplined and comprehensive follow-up and referral-prospecting plan.

The "repeat buyer" OTDB is defined as a customer who, from you, replaces the last vehicle he purchased from you. Repeat buyer metrics will vary by manufacturer and that's why, to have meaningful target metrics for this category, you need to know how your manufacturer measures owner loyalty "to the franchise."

As an example, Ford Motor Company has been measuring, and attempting to improve, both "franchise loyalty" and "dealer loyalty" for a number of years. Ford's franchise loyalty has always verged around 50%, meaning that for every hundred people who disposed of a Ford product, half of those would

purchase or lease a new Ford product. Franchise loyalty for some highline products, particularly Lexus, BMW, and Mercedes-Benz, is understandably much higher than Ford's.

Repeat buyer metrics will also vary based on the number of similar franchised dealers in your market. Dealer loyalty applies to that customer who previously bought a vehicle from your dealership and replaces that vehicle with the same franchise new vehicle at your dealership. Obviously, it is far easier to maintain dealer loyalty with one Ford dealer in a market than it is with four Ford dealers in the market.

metrics will vary by the average consumer's buying cycle for your franchise or market. Although few dealers actually *know* this number, everyone's best estimate ranges between 3.5 and 4.5 years. So for the purpose of establishing sample metrics for repeat buyers we'll use four (4.0) years. In this sample we'll also use a franchise loyalty of 60% and a dealer

loyalty of 60%, for an overall loyalty factor of 36% (60% x 60% = 36%). This would mean that if a sales consultant delivered 100 vehicles of a specific franchise in Year One, then in Year 5 (considering the 4.0 year buying cycle), he/she should expect to deliver 36 repeat buyers.

## **The Plan of Success**

#### For a Newly Employed, Inexperienced Vehicle Sales Consultant (Non-High Line)

		Vehicle Sales (Deliveries) and Income Stream								
	Source of Business	Year One	Year Two	Year Three	Year Four	Year Five				
1	Dealership Generated OTDB's	48	54	60	36	24				
2	Circle Of Influence & Be-Backs	48	42	36	30	24				
3	"Bird-Dog" Network	6	12	18	24	30				
4	Service Drive	12	12	12	12	12				
5	Owner Referrals	0	29	66	114	173				
6	Repeat Business	<u>0</u>	<u>0</u>	<u>0</u>	<u>20</u>	<u>46</u>				
7	Total Deliveries	114	149	192	236	309				
8	Average Commission Per Unit	\$350	\$360	\$370	\$385	\$400				
9	Target Income	\$39,900	\$53,640	\$71,040	\$90,860	\$123,600				

"It is The Responsibility Of Management To Ensure Plan Effectiveness!"

#### **Assumptions:**

- 1 Includes 1st Time Walk-Ins Only.
- 2 Family Members, Friends, Acquaintances, Walk-of-Life Interfaces, "Be-Backs" (Management-Directed Plan).
- 3 Developed With Management Direction and Assistance.
- 4 Orphan and Visiting Owners Prospected as a Result of Assigned Shifts on Service Drive (Mgt.-Directed).
- On Average, One (1) Referral (or Second Vehicle) Per Owner, Over a Typical 4-Year Trade Cycle.
- 6 Assumed at Minimum 35% In Year 4 Of Ownership Cycle.

or one referral delivery. In the simplest terms, assuming an even distribution of sales and a buy cycle of 4 years, the sales consultant who delivered 100 could count on the ditional household eliveries: Years Two cles per Year = 100

The metrics for

additional

household

vehicles and

owner referrals

are even more

Research shows

timely, intelligent,

and consistent

sales follow-up

and prospecting

process, each

average, over

his/her buying

responsible for

one additional

vehicle delivery

household

cycle, will be

owner, on

impressive.

that with a

disciplined.

FIGURE 5.

E 5. vehicles in Year One, could count on the following stream of *additional* household vehicles and referral deliveries: Years Two through Five – averaging 25 Vehicles per Year = 100 Total Vehicles.

#### "Bird Dog" Referrals

Unlike the owner referral group of OTDBs, where we expect one additional household vehicle or referral delivery per owner <u>every four years</u>, our expectations for our bird dogs are quite different. We expect a referral delivery from a bird dog <u>every four months</u>.

The NCM training and consulting teams have assisted dealerships and sales consultants to establish very productive bird dog networks, even in states where it is not permissible to pay non-licensed parties for referrals.

A well organized, disciplined, managed, and executed Registered Referral (bird dog) Program demands that each sales consultant engages, employs, and nurtures two bird dogs during Year One of his career and that he grows his bird dog network by at least two people per year. As shown in Figure 5, this means that in Year Three the sales consultant has six (6) bird dogs, each producing three (3) deliveries per year, for a total of eighteen (18) unit deliveries.

Unlike the owner referral group of OTDBs, where we expect one additional household vehicle or referral delivery per owner <u>every four years</u>, our expectations for our bird dogs are quite different. We expect a referral delivery from a bird dog <u>every four months</u>.

#### **Orphan Owners**

An "orphan owner" is a customer who has purchased a vehicle from the dealership, but whose original salesperson is no longer employed by the dealership. Orphan owners rarely get the focus they deserve, either from sales management or from the sales staff. The process that the NCM training and consulting teams recommend for maximizing sales from orphan owners will produce the same results as those previously discussed for repeats and owner referrals.

#### Salespersons' Circle of Influence (COI)

This group of non-current prospects includes relatives, friends, neighbors, and everyone else that the sales consultant has developed a personal relationship with during his walk-of-life. Those of us that were in automotive sales in the 1960s and early 1970s know that our incomes (and even our jobs) were greatly dependent on how well we cultivated and nurtured our personal "circle of influence."

Those of us that were in automotive sales in the 1960s and early 1970s know that our incomes (and even our jobs) were greatly dependent on how well we cultivated and nurtured our personal circle of influence.

I remember my first sales manager saying to me, "Everyone you know, everyone your wife knows, and everyone your mother and father know need to become aware that you are in the car business and want the chance to earn their business. Not everyone is a prospect for a new Oldsmobile, but everybody's driving something. You need to be the transportation specialist for your circle of influence. Achieving your earnings expectation over the next few years will be dependent on your COI."

Before a new salesperson was even allowed to take an UP or an inbound telephone inquiry, many dealers *demanded* that the salesperson develop a detailed manual file system consisting of each person in his personal COI, and that he send a letter to (and make phone contact) with each person in that file.

Why is it then, in today's dealerships, this group of OTDBs is largely ignored by most managers? Unless someone in a salesperson's COI has bought a vehicle (or tried to buy a vehicle) we rarely find the names and data on these people in the dealership CRM system. The potential sales to this OTDB group are far too large to be overlooked.

The NCM training and consulting teams have developed and implemented processes to identify and engage the salespersons' COI.

Remember...these OTDBs will also deliver at 50%+ when dealt with in a face-to-face environment.

#### Service Department Prospects

Do you know how many good vehicle sales prospects arrive in your dealership's Service Department each month? If not, don't think you're unique. Most dealers are embarrassed when asked that question, and quickly admit that they **should** know the answer.

The NCM training and consulting teams have developed the "Service Ambassador" process, that when effectively implemented and executed will not only answer the question...it will sell you *a lot more* new and used vehicles. Some of the dealers who have successfully adopted this process now include customer-pay service visitors in their vehicle sales department OTDB count.

Figure 6, used by the NCM field team for sales consultant productivity modeling, demonstrates the metrics for this OTDB category beginning with Item 33. In this example, the dealership Service

Department writes 1,100 customer-paid R.O.s per month. Research shows that in domestic and non-luxury import dealerships, the average odometer reading on these vehicles is 50,000 – 60,000 miles. Would it be reasonable to assume that

What many dealers and their sales managers aren't cognizant of is that, according to national averages, approximately 40% of the customers that do business with our Service Departments are visiting owners. They did not buy their vehicle from our dealership's vehicle sales department!

10% of those vehicles should be replaced? (Figure 6, Item 34)

In this example, of the 110 vehicles that should be replaced (Figure 6, Item 35), let's further assume that if approached at the right time and in the right manner, 40% (Figure 6, Item 36) of those 110 owners would be willing to consider replacing their vehicles, and would agree to an appointment with our salesperson.

And since we're already doing business with (*have a relationship with*) these 44 owners (Figure 6, Item 37), they should also close at 50% (Figure 6, Item 38) and produce at least 22 "near-future" vehicle sales (Figure 6, Item 39).

What we've been discussing so far is "near-future" sales, meaning tomorrow, or next week, or two weeks from now. But what about next year, or the year after that? What many dealers and their sales managers aren't cognizant of is that, according to national averages, approximately 40% of the customers that do business with our Service Departments are "visiting owners." They did not buy their vehicle from our dealership's vehicle sales department!

The NCM Service Ambassador process also addresses the visiting owner issue to ensure that the vehicle sales department builds a relationship with

this group of customers.
When this customer thinks about vehicle replacement, we want him to think of our dealership first!

#### Sales Consultant Productivity Modeling XYZ Chrysler-Jeep-Dodge 15.0 25.5 Number of "Conventional" (Non-Specialized) Sales Personnel Number of Total Selling Days Per Average Month 0.50 21.7 Number of Scheduled Days Per Sales Consultant Number of "Walk-Ins" Per Scheduled Day Per Sales Consultant Item 4, "Walk-Ins" Are Defined as "Fresh" Opportunities To Do Business (OTDBs), that have No Verifiable "Relationship" with Either the Dealership or the Salesperson. In most cases this OTDB will Never Have Done, nor Never Tried To Do, Business With Our Dealership. Total Number of Walk-In Customers Per Month (#1 x #3 x #4) 162 Delivery Rate (Immediate) on Walk-In Customers 15.0% Number of Deliveries (Immediate) to Walk-In Customers 24.3 Number of "Blind" Inbound Phone Inquiries Per Selling Day 5.5 Number of "Blind" Inbound Phone Inquiries Per Month 140.3 10 Percent Appointments Set On All "Blind" Phone Inquiries **50.0**9 Number of Appointments Set On All "Blind" Phone Inquiries 70.0 Percent of Phone Appointments That "Show" at Dealership 50.0% Items 10, 11, and 12 Assume That All "Blind" Inbound Phone Calls Are Handled By a Telemarketing Specialist (BDC Appointment Coordinator) or By a Dealership Sales Manager, and Appointments That Show Are Distributed to Conventional Sales Consultants. 35.1 50.0% 13 Number of Phone Appointments That "Show" at Dealership Delivery Rate (Immediate) to Phone Appointments That "Show Number of Deliveries (Immediate) to Phone Appointments 17.5 100 16 Number of Electronic Internet Leads (Purified) Per Month Percent Appointments Set On Purified Electronic Internet Leads Number of Appointments Set On Electronic Internet Leads 50.0 18 19 Percent of Internet Appointments That "Show" at Dealership 20 Number of Internet Appointments That "Show" at Dealership 30.0 Items 17, 18, 19, and 20 Assume That Electronic Internet Leads Are Handled By an Internet/Telemarketing Specialist (BDC Appointment Coordinator), and Appointments That Show Are Distributed to Conventional Sales Consultants 15.0 50.0% 21 Delivery Rate (Immediate) to Internet Appointments That "Show" Number of Deliveries (Immediate) to Internet Appointments Delivery Subtotal (#7 + #15 + #22) 170.2 23 56.8 Number of Unsold Showroom Prospects (#5 + #13 + #20 - #23) 24 51.1 25 Percent of Unsold Prospects Turned Into "Be-Backs" 30.0% 26 Number of "Be-Backs" That Return to Dealership 27 Delivery Rate to "Be-Backs" Number of Deliveries to Unsold Prospects ("Be-Backs") 25.5 28 Items 25, 26, and 27 Assume That a Disciplined "Make-a-Deal" Process is Executed That Ensures Timely, Consistent, and Intelligent Follow-Up on Unsold Prospects by the Dealership Sales Management Staff. (This Process May Be Assisted By a 3rd Party Sub-Contractor.) Number of "Bird Dogs" Per Sales Consultant 2.0 Referral Deliveries Per Year Per "Bird-Dog" 3.0 Referral Deliveries Per Month Per "Bird-Dog" 0.25 Number of Deliveries to "Bird-Dog" Referrals (#1 x #30 x #31) 7.5 Items 29, 30, and 31 Assume That a Disciplined and Aggressive Management-Directed "Bird Dog" (RRC) Program is Well-Planned and Well-Executed. 10.0% 33 Number of "Cash-Pay" Service Customers Per Month 1.100 Potential Incremental Vehicles That Could Be Replaced 110.0 35 Potential Number of Vehicles That Could Be Replaced 36 Appointment % With Owners of Potentially Replaceable Units 40.0% 37 Number of Appointments With Owners of these Units 44.0 38 **Delivery Rate On Potentially Replaced Vehicles** 50.0% Items 34, 35, 36, 37, and 38 Assume That a Disciplined and Aggressive Management-Directed "Service Ambassador "Program is Well-Planned and Well-Executed. 55.0 Number of Deliveries Through "Service Ambassador" Program 22.0 40 Delivery Subtotal (#28 + #32 + #39) 39 7.5 41 Delivery Subtotal (#23 + #40) 111.9 42 Per Salesperson Delivery Subtotal (#41 ÷ #1) 75.0 Other Self-Generated Appointments Per Salesperson Per Month 5.0 Number of Other Self-Generated Appointments Per Month Items 43 and 44 Assume That a Disciplined and Aggressive Management-Directed Prospecting Program Toward Current Owners (Additional, Repeat, and Referral Business), Orphan Owners, Sales Consultant's "Circle of Influence", and Collision Center Customers is Well-Planned and Well-Executed 45 **Delivery Rate to Other Self-Generated Appointments** 50.0% **Number of Deliveries To Self-Generated Appointments** 37.5 Delivery Total (#41 + #46) 149.4 48 Per Salesperson Delivery Total (#47 ÷ #1) 10.0 49 **Total Opportunity (OTDB) Count** 594.8 50 **Overall Delivery Rate** 25.1% **Number of Appointments Per Month** 51 242.6 **Percent of Total Opportunity Count** 40.8% (Item #13 + #20 + #26 + #32 + #37 + #44) **Number of Sales to Appointments Per Month** 53 125.1 54 **Percent of Total Unit Deliveries** 83.7% (Item #15 + #22 + #28 + #32 + #39 + #46) Items 51, 52, 53, and 54 Assume That a Well-Planned, Disciplined, and Aggressive Management-Directed "Appointment Solicitation Process" is Well-Planned, Well-Executed, and Visible,

FIGURE 6.

#### The Be-Back OTDB

Although there will be some be-backs from the faceto-face opportunities developed through repeats, referrals, circle of influence, and service department prospects, the vast potential in turning unsold prospects into be-backs is with:

- 1st time walk-ins
- Inbound blind phone inquiries
- Internet leads

Referring again to figure 6, the number of unsold prospects relating to face-to-face OTDBs in the above three categories shown in the example is displayed as 170 in Item 24. The NCM training and consulting teams have proven that with an intelligent, consistent follow-up discipline, practiced both by sales management and the salespeople, 30% of the unsold prospects (Figure 6, Item 25) can be returned to the dealership for an appointment. This be-back number of 51 (Figure 6, Item 26) considers the 15% of the unsold prospects who *can't* buy now and the 5% - 10% who didn't at all like their earlier dealership experience.

The discipline that the NCM teams have successfully implemented at many client dealerships is the "Make-a-Deal" process, where one of the first daily priorities is to establish strategies and accountability for turning yesterday's unsold prospects into today's be-backs.

The discipline that the NCM teams have successfully implemented at many client dealerships is the "Make-a-Deal" process, where one of the first daily priorities is to establish strategies and accountability for turning yesterday's unsold prospects into today's be-backs.

We should deliver at least 50% of these be-backs (Figure 6, Item 27), resulting in slightly more than 25 additional retail unit sales. (Figure 6, Item 28)

# The Appointment Solicitation Process and Discipline

At the bottom of Figure 6 we demonstrate the importance of a disciplined and well-managed "appointment solicitation" process. In this model, over 40% of total OTDBs are anticipated to be the result of an aggressive appointment process (Item 52). More impressively, however, this model projects that 83.7% of total vehicle deliveries (Figure 6, Item 54) will result from the appointment process.

#### **Financial Services Mathematics**

This section on Variable operations would not be complete without at least some discussion of the metrics for the dealership's F&I Department. The primary metric of focus by almost every dealership has been, and still is, Net F&I Income per Retail Unit Delivery. Over the last 10 years, the public dealership groups have set new standards for this metric (see Figure 7).

F&I INCOME Average F&I income per Vehicle Retailed- 2010 Source: Company Reports								
AutoNation \$1,093								
Lithia	\$977							
Group 1	\$1,057							
Sonic	\$957							
Asbury	\$1,003							
Penske	\$937							

FIGURE 7.

While \$1,000 per retail unit was previously only a dream for many dealers, most today believe that with the right people, products, and processes, joining the "\$1,000 Club" is certainly

achievable.

There are numerous submetrics (product penetration levels, gross per product, etc.) which comprise the primary metric, but these will

vary significantly based on a number of considerations. Some of these are:

- 1. The amount of new vehicle leasing at the dealership.
- 2. The ratio of used retail unit units to new retail units.
- The Amount of Special Finance and "Budget" (Cash) used vehicle business at the dealership.
- 4. Whether the dealership sells the manufacturer service contracts or 3rd party contracts.
- 5. State regulation of finance rates and product pricing.
- 6. Whether the dealership practices early F&I "intervention."
- 7. The average customer wait time to access the F&I department.
- 8. The number of F&I Producers. Research proves that the highest \$PVRs are achieved by producers who handle no more than 75 retail deliveries per month.

Figure 8 provides examples of the Financial Services metrics that should be measured and managed.

The metrics shown are the Benchmark® figures for the 149 Metro Ford client-dealers, averaging 175 retail units per month, that report monthly financial information to NCM Associates, Inc. The Benchmark data is the average of the top 75 F&I performers in this group. There is no reason why these metrics could not be applied to any domestic or non-luxury import dealership.

#### <u>Sales Department Organizational</u> Considerations

While \$1,000 per retail unit was previously only a dream for many dealers, most today believe that with the right people, products, and processes, joining the "\$1,000 Club" is certainly achievable.

Consider the example in Figure 6. This

salespeople are trained to handle anything and

everything, and the department is disciplined

represents every dealer's dream. All

and process-driven.

The NCM training and consulting teams are often asked, "Does the sales department organizational structure affect sales mathematics, and if so, what do you recommend?" The

answer to the first question, most definitely, is, "yes." A vehicle sales department that is understaffed will rarely be able to achieve the metrics discussed in this report. The first variable to consider is OTDBs per salesperson per month. Consider the example in

Figure 6. This represents every dealer's dream. All salespeople are trained to handle anything and everything, and the

department is disciplined and process-driven. With this, each salesperson requires slightly less than 40 OTDBs per month (Item 49 ÷ Item 1) to deliver 10 retail units. However, in order to accomplish this delivery ratio the department will probably require 4 above-average sales managers, or 3 exceptional, highly-compensated sales managers. Perform the math yourself.

Use a \$2,500 overall PVR, a 17.5% sales compensation expense, and a 10% sales management compensation expense. *Everybody makes a lot of money, right?* 

But let's assume you're normal. You don't have the luxury of 100% great managers, and all of your salespeople can't "do it all"! Now what happens to the metrics? They change dramatically (*yeah*, *they definitely diminish*) unless you enhance the organization with "specialists" or with a BDC.

# Example NCM Financial Services Metrics Ford Metro Dealers - YTD through 4/30/2011

	Description of Metric	Benchmark
1	Finance Penetration Percentage of Total Retail	68.10%
2	Gross Finance Reserve per Finance Contract	\$552
3	Net Finance Reserve Income % of Department Income	30.83%
4	Credit Insurance Penetration Percent of Finance Contracts	15.90%
5	Gross Income per Insurance Contract	\$874
6	Net Creditor Insurance Income % of Department Income	2.76%
7	GAP Insurance Penetration Percent of Finance Contracts	37.20%
8	Gross Income per GAP Insurance Contract	\$374
9	Net GAP Insurance Income % of Department Income	7.57%
10	Extended Service Contract Penetration % of Total Retail	45.70%
11	Gross Income per Extended Service Contract	\$982
12	Net Service Contract Income % of Department income	35.92%
13	Prepaid Maint/Rental Penetration Percent of Total Retail	22.00%
14	Gross Income per Prepaid Maintenance/Rental Contract	\$535
15	Net Prepaid Maint/Rental Income % of Department Income	11770.00%
16	Other Financial Services Income per Retail Unit	\$126
17	Net Other Financial Services Income % of Dept. Income	11.78%
18	Net Financial Services Income Per Retail Unit	\$1,118

FIGURE 8.

And this is not a bad idea, but if you decide to adopt the specialist, or BDC, organizational plan and culture, please make sure you anticipate, and effectively strategize for, the compensation and political challenges you will certainly face.

The NCM training and consulting teams have experience helping dealers resolve these organizational challenges. Lean on them for support. You'll be glad you did!

#### **Sales Mathematics for Fixed Operations**

Although the metrics for the Service Department, Collision Center, and Parts Department are in a somewhat different format than in Variable Operations, it's still "all

The labor sales potential for any franchised dealer's service department is first dependent on the "units in operation (UIOs)" for that franchise in the dealer's market.

Unfortunately, very few of the manufacturers provide this UIO information to their dealers.

To perform the third calculation (Figure 9, Items #8 and #9), you must input the average number of hours billed (combined for customer-paid and warranty) at each service

about the numbers" in Fixed Operations. Just because Sales Mathematics takes on a different look in Fixed Operations, the importance of the metrics and how they relate to each other cannot be overemphasized.

visit. The dealership in this example determined that the average combined hours per visit was 2.15.

#### **Service Department Sales Mathematics**

Of all the departments in the dealership, Service has
a distinct advantage with one metric. It enjoys a
nearly 100% closing percentage on all face-to-face
encounters. When a customer visits our service
department, there <b>should be a sale</b> , even though it
may be paid for through a warranty or service
contract claim. So let's go through the steps
necessary to plan and manage the other important
metrics for this department.

# Calculating the Service Department Market Potential

The labor sales potential for any franchised dealer's service department is first dependent on the Units in Operation (UIOs) for that franchise in the dealer's market. Unfortunately, very few of the manufacturers provide this UIO information to their dealers.

Some dealers may wish to estimate their UIO count. For a fee, this information is available from R.L. Polk. Figure 9 (items #1 through #5) demonstrates how this should be accomplished.

This example assumes an average ownership cycle of four years.

The second calculation (Figure 9, Items #6 and #7) involves estimating the number of annual service visits by the vehicle owner. This number, usually averaging between 2.0 and 3.0 visits per year, will vary both by franchise and geographic region.

	Calculation of Service Market Potential							
	Description of Metric		Amount					
1	Total New Vehicle Unit Sales (Last 4 Years)		4,877					
2	Total Unit Sales of Franchised Used Vehicle Products (Last 4 Years)	+	2,817					
3	Total Sales of Franchised Products (Last 4 Years)	=	7,694					
4	Estimated % Of Vehicles Still Registered "In-Market"	X	85.0%					
5	Estimated Units-In-Operation (UIOs)	=	6,540					
6	Number of Anticipated Service Visits Per Year Per UIO	X	2.5					
7	Potential Number of Customer-Paid and Warranty Repair Orders for the Dealership Service Department	· II	16,350					
8	Average Number of Flat Rate Hours Per Customer-Paid and Warranty Repair Order	X	2.15					
9	Total Annual Flat Rate Hours (Customer-Paid and Warranty)	"	35,152.0					
10	Current Blended Effective Labor Rate (C-P and Warranty)	X	\$71.55					
11	Total Annual Potential Customer-Paid and Warranty Service Department Labor Sales	=	\$2,515,123					

#### FIGURE 9.

Finally, in Figure #9, Items #10 and #11, we apply the blended effective labor rate for customer-paid and warranty labor, and calculate the annual service sales potential for the combined customer-paid and warranty labor categories. Should you base your annual forecast on, and apply your resources to, this market potential? Not necessarily; it depends on how your current level of labor sales compares to this forecast. In nearly 25

years of training and consulting, I have had only one client-dealer who's combined customer-paid and warranty labor sales approached 100% of his market potential. Most of my client-dealers have initially been in the 50% -

75% range. What you need to recognize is that 100% of this market potential **should be** yours!

For a number of reasons, most dealers have allowed a large portion of these potential sales dollars to flee to the competition (and I don't mean to other dealers of like franchise).

The NCM training and consulting teams have helped a large number of dealers do a much better job of regaining a significant portion of this lost market potential. It's really not that difficult; set realistic improvement targets, "plan your work, and work your plan."

# Calculating Available Labor Hours, Potential Labor Sales, and Potential Gross Profit

One of the more important mathematical steps in the Service Department is to calculate your available inventory of labor hours. The sample Excel worksheet displayed as Figure 10 will help you do that and more. As with all my Excel worksheets, the cells with values shown in blue font are for input. All other cells automatically calculate.

For our example department, the ABC Toyota main shop, after completing the input at the top of the worksheet and in Columns 1 through 7, the calculations show that the technician group should enjoy an average productivity level of 105.2% and a calendar efficiency of 92.0%; the group should produce 3,351.3 total flat rate hours for the month, with the average technician producing 209.5 hours. Assuming everything works as planned, our labor inventory available for sale at the beginning of the month is slightly more than 3,350 hours; unlike the inventory in our sales department and parts department, the monthly service labor is irreplaceable; it diminishes daily, and once it's gone, it's really gone.

The remaining columns in the worksheet are used to estimate the total direct labor sales and gross profit for the month. To calculate these totals, you first need to estimate the average selling price (blended

Most of my client-dealers have initially been in the 50% - 75% range. What you need to recognize is that 100% of this market potential **should be** yours! effective labor rate) for each technician's hours. In this example,

we're assuming that these hourly sales rates will vary, but be consistent, by technician skill level; i.e. all "A" skill hours will sell for \$78.00, all "B" skill hours will sell for \$73.00, all "C" skill hours will sell for \$67.00, and all "D" skill hours will sell for \$62.00.

Unlike the inventory in our sales department and parts department, the monthly service labor is irreplaceable; it diminishes daily, and once it's gone, it's really gone.

The only thing remaining to be input is the adjusted cost of labor sales (unapplied time). The calculated results then become:

- 1. Total Direct Labor Sales \$236,490
- Blended Overall Effective Labor Rate -\$70.57
- Total Direct Labor Gross Profit \$177,246
- Gross Profit Margin on Direct Labor Sales 74.95%
- 5. Gross Per Technician Per Month \$11,078

Each of the individual metrics displayed in Figure 10, both by technician and for the shop as a whole, should be measured and managed continuously.

Each of the individual metrics displayed in Figure 10, both by technician and for the shop as a whole, should be measured and managed continuously.

# Monthly Service Department Inventory, Direct Labor Sales, and Direct Labor Gross Profit Planning - Main Shop - ABC Toyota

### Monthly Technician Production Objectives

Hours Per Regular Work Day: 9.0 Number of Regular Work Days: 22
Hours Per Saturday: 7.5 Scheduled Saturdays: 4

Period: May

Year: 2011

	1	1							_					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Technician Name		8 K - L L	Full Day Flat Rate Hour Obj.	H O R U A R T L E Y	W D O A R Y K S	S A T E U D D A Y D D L S	PAYS OFF	E C F A F L I E C N I D E A N R C	Total Flat Rate Hour Obj.	Approx. Mthly. COS	Est. Avg. ELR	Est. Avg. Labor Sales	Est. Avg. Gross Profit	Est. Avg. Gross Profit Margin
1	David Giltner	A	11.0	\$22.00	22.0		1.5	93.2%	225.5	\$4,961	\$78.00	\$17,589	\$12,628	71.79%
2	Dave Basa	В	10.5	\$18.00	22.0	2.0	2.0	91.7%	227.5	\$4,095	\$73.00	\$16,608	\$12,513	75.34%
3	Russell Cook	С	9.0	\$15.50	22.0	4.0	6.0	76.9%	174.0	\$2,697	\$67.00	\$11,658	\$8,961	76.87%
4	John Susino	В	12.0	\$18.00	22.0	2.0	1.0	95.8%	272.0	\$4,896	\$73.00	\$19,856	\$14,960	75.34%
5	Jim Swanson	В	10.0	\$18.00	22.0	2.0	1.0	95.8%	226.7	\$4,080	\$73.00	\$16,547	\$12,467	75.34%
6	Juan Perez	В	9.5	\$18.00	22.0	4.0	2.0	92.3%	221.7	\$3,990	\$73.00	\$16,182	\$12,192	75.34%
7	Shaun Bradham	D	6.5	\$13.00	22.0	4.0	3.0	88.5%	145.2	\$1,887	\$62.00	\$9,000	\$7,113	79.03%
8	Bobby Hartigan	В	10.0	\$18.00	22.0	2.0	1.0	95.8%	226.7	\$4,080	\$73.00	\$16,547	\$12,467	75.34%
9	Darryl Dossey	D	7.0	\$13.00	22.0	4.0	2.0	92.3%	163.3	\$2,123	\$62.00	\$10,127	\$8,003	79.03%
10	Jim Smith	A	11.5	\$22.00	22.0		2.0	90.9%	230.0	\$5,060	\$78.00	\$17,940	\$12,880	71.79%
11	Jason Ellisor	В	9.5	\$18.00	22.0	2.0	3.0	87.5%	196.3	\$3,534	\$73.00	\$14,332	\$10,798	75.34%
12	Bill Mangold	D	8.5	\$14.50	22.0	4.0	1.0	96.2%	206.8	\$2,999	\$62.00	\$12,824	\$9,825	76.61%
13	Charles Napalitano	В	9.5	\$18.00	22.0	2.0	1.0	95.8%	215.3	\$3,876	\$73.00	\$15,719	\$11,843	75.34%
14	Ken Mathews	С	9.0	\$15.50	22.0	4.0	3.0	88.5%	201.0	\$3,116	\$67.00	\$13,467	\$10,352	76.87%
15	Vijay Maharat	С	8.0	\$15.50	22.0	2.0	1.0	95.8%	181.3	\$2,811	\$67.00	\$12,149	\$9,339	76.87%
16	Mark Bach	C	10.5	\$15.50	22.0	2.0	1.0	95.8%	238.0	\$3,689	\$67.00	\$15,946	\$12,257	76.87%
	Estimated Adjusted Cost of Labor Sales (Un-Applied Time)												(\$1,350)	
	Technician Total		152.0	\$17.35	352.0	40.0	31.5		3,351.3	\$57,894	\$70.57	\$236,490	\$177,246	74.95%
	Но	urs P	er Tech	nician Pe	r Month	209.5		92.0%	105.2%	Gross P	er Techr	nician/Mo.	\$11,078	

FIGURE 10.

# Calculating Available Inventory of Customer-Paid Labor Hours

Of the 3,351.3 total available labor hours at the main shop of ABC Toyota, how many will be available for sale in the Customer-Paid category? To determine this we'll use the Excel worksheet displayed as Figure 11.

First we need to get some information from the managers in the variable departments. They need to tell us:

1. How many new vehicles

they expect to receive from Toyota in the upcoming month? (Figure 11, Item #2)

- 2. How many new vehicles they expect to retail? (Figure 11, Item #5)
- How many used vehicles will be entered into the reconditioning process? (Figure 11, Item #8)

Since we know our history of average flat rate hours per vehicle in each of the three above categories (Figure 1, Items #3, #6, and #9), we can calculate the total number of "internal" flat hours we are going to sell (Figure 11, Item #11).

## **Calculation of Projected Service Business Mix**

Main Shop - ABC Toyota - May, 2011

	Description of Metric		Amount
1	Total Monthly Flat Rate Hours Available	3	351.3
2	Number of Projected New Vehicles Received		145
3	Avg. Flat Rate Hours Per New Vehicle Inspection	х	0.8
4	Total Flat Rate Hours - New Vehicle Inspection	=	116.0
5	Number of Projected New Vehicle Deliveries		175
6	Avg. Flat Rate Hours Per Delivery (Accessorization)	х	1.3
7	Total Flat Rate Hours - New Vehicle Accessorization	=	227.5
8	Projected Number of Used Vehicles Reconditioned		250
9	Average Flat Rate Hours Per Vehicle Reconditioned	х	2.3
10	Total Flat Rate Hours - Used Vehicle Reconditioning	=	575.0
11	Total Internal Flat Rate Hours (#4 + #7 + #10)		918.5
12	Avg. Monthly Warranty Labor Sales (Last 3-Months)		\$68,366
13	Effective Labor Rate - Warranty Labor Sales	÷	\$83.27
14	Projected Total Flat Rate Hours - Warranty Claims	=	821.0
15	Total Flat Rate Hours Available for Customer-Paid Labor Sales (#1 - #11 - #14)	1,	,611.8

FIGURE 11.

The final calculation to determine main shop "business mix" involves determining the number of warranty claim labor hours we expect to sell. Unless we have other information such as the announcement of a safety recall campaign—recent history will be the best indicator of our next month's warranty labor sales.

We therefore input both our average warranty labor sales (most recent 3-months) and our warranty labor rate, and the Excel worksheet calculates our

planned flat rate hour sales for warranty claim labor. (Figure 11, Items #12, #13, and #14)

Through simple subtraction, the Excel worksheet now tells us that we will have a little better than 1,600 hours available next month to sell to customers in the main shop. We again recommend that the individual metrics shown in Figure 11 be measured and reviewed on a regular basis.

	Service Department Productivity Modeling - Customer-Paid Labor  Main Shop - ABC Toyota - May, 2011								
1	Projected Number of Customer-Paid Transactions (R.O.s)	0		3	<u> </u>	0.0			
2	Average Flat Rate Hours Per "Prime Item" Request	1.4		Ū		0.0			
	"Prime Item" is defined as the customer's MAIN REASON for visiting the dealership Service Department. This Item should be clearly addressed and understood by the Service Advisor, prior to any additional sales recommendations.								
4	Projected Percent "Menu Opportunities" (% of R.O. Count)	40.0%		5	Projected Number of "Menu Opportunities"	0			
6	Projected "Menu Closing Percentage"	35.0%		7	Projected Number of "Menu Sales"	0			
8	Avg. Number of Flat Rate Hours Per "Menu Sale"	2.6		9	Total Flat Rate Hours From Customer "Menu Sales"	0.0			
	Items 4, 5, 6, 7, 8, and 9 Assume That Well-designed Menus, match "What, Why, and How Much" are Professionally Presented to "Cu								
10	Projected Percent "Today's Special" Sales (% of R.O. Count)	20.0%		11	Projected Number of "Today's Special" Sales	0			
12	Avg. Number of Flat Rate Hours Per "Today's Special" Sale	0.8		13	Total Flat Rate Hours From Customer "Today's Special" Sales	0.0			
	Items 10, 11, 12, and 13 Assume That a Highly-Visible, Relevent, "T and Motivated to Professionally Present These Offerings.	oday's Spec	ial'	" Pr	ogram is Always In Effect, and that Service Advisors are Trained				
14	Projected Percent "ASR Inspections" Performed (% of R.O. Count)	85.0%		15	5 Projected Number of "ASR Inspections" Performed	0			
16	Projected Percent "ASR Sales" Recommended	60.0%		17	7 Projected Number of "ASR Sales" Recommended	0			
18	Avg. Number of Flat Rate Hours Per "ASR Recommendation"	3.5		19	Number of "ASR Recommended" Flat Rate Hours	0.0			
20	Projected Percent "ASR Sales" Closed By Service Advisors	40.0%		21	Total Flat Rate Hours From Customer "ASR Sales"	0.0			
	Items 14, 15, 16, 17, 18, 19, 20 and 21 Assume That a Disciplined Ac Executed Consistently, with Both Advisors and Technicians Being								
22	Total Projected Customer-Paid Flat Rate Hours	0.0		23	3 Average Flat Rate Hours Per Customer R.O.	2.64			

#### FIGURE 12A

## Customer-Paid Labor Sales—The Math Within the Math

Now that we've determined that we have approximately 1,600 hours available for customerpaid labor at ABC Toyota's main shop, will the sale of these hours just happen? Certainly not! Selling these hours will require the right planning, the right people, and the right processes. We'll use the Excel worksheets displayed as Figures 12a and 12b to help develop the plan and identify the required processes. The first thing we need to do is input some metrics for the even numbered items on the left side of the page. (That's right..."1" is not an even number, so we don't yet input anything for that item.) These entries will determine the average "quality" of our customer-paid transaction.

The entry for Item # 2, the customers "Prime Item" is 1.4 flat rate hours in this example, determined from the averages in our service history files. There is no best practice guideline for this metric, as it will vary by franchise and geographic region.

The second group of numbers (Figure 12a, Items #4, #6, and #8) relate to the expected metrics from the presentation and sale of recommended major services (or factory scheduled maintenance menus). Item #4 is predictable based on two factors:

- 1. The average odometer reading of our service visitors (which, if you recall we said was usually between 50,000 and 60,000 miles in a domestic or non-luxury import store), and
- 2. The factory recommended maintenance menu interval, which for Toyota is typically every 7,500 miles. Any vehicle at a 7,500 mileage increment (+/-1,000 miles) is considered a "menu opportunity."

Service Department Productivity Modeling - Customer-Paid Labor  Main Shop - ABC Toyota - May, 2011								
1	Projected Number of Customer-Paid Transactions (R.O.s)  610  3 Total Flat Rate Hours From Customer "Prime Items"	854.0						
2	Average Flat Rate Hours Per "Prime Item" Request  "Prime Item" is defined as the customer's MAIN REASON for visiting the dealership Service Department. This Item should be clearly addressed and understood by the Service Advisor, prior to any additional sales recommendations.							
4	Projected Percent "Menu Opportunities" (% of R.O. Count)  5 Projected Number of "Menu Opportunities"	244						
6	Projected "Menu Closing Percentage" 7 Projected Number of "Menu Sales"	85						
8	Avg. Number of Flat Rate Hours Per "Menu Sale"  2.6  9 Total Flat Rate Hours From Customer "Menu Sales"	222.0						
	Items 4, 5, 6, 7, 8, and 9 Assume That Well-designed Menus, matching the Manufacturer-Recommended Maintenance Schedule, clearly displaying "What, Why, and How Much" are Professionally Presented to "Customer" Menu Opportunities" in a Consistent, Disciplined Manner.							
10	Projected Percent "Today's Special" Sales (% of R.O. Count)  11 Projected Number of "Today's Special" Sales	122						
12	Avg. Number of Flat Rate Hours Per "Today's Special" Sale  0.8  13 Total Flat Rate Hours From Customer "Today's Special" Sales	97.6						
	Items 10, 11, 12, and 13 Assume That a Highly-Visible, Relevent, "Today's Special" Program is Always In Effect, and that Service Advisors are Trained and Motivated to Professionally Present These Offerings.							
14	Projected Percent "ASR Inspections" Performed (% of R.O. Count)  85.0%  Projected Number of "ASR Inspections" Performed	519						
16	Projected Percent "ASR Sales" Recommended 17 Projected Number of "ASR Sales" Recommended	311						
18	Avg. Number of Flat Rate Hours Per "ASR Recommendation"  3.5  Number of "ASR Recommended" Flat Rate Hours	1,088.9						
20	Projected Percent "ASR Sales" Closed By Service Advisors 21 Total Flat Rate Hours From Customer "ASR Sales"	435.5						
	Items 14, 15, 16, 17, 18, 19, 20 and 21 Assume That a Disciplined Advisor "Walk-Around" Process and a Technician "Vehicle Inspection Process" are Executed Consistently, with Both Advisors and Technicians Being Held Accountable for Process Compliance.							
22	Total Projected Customer-Paid Flat Rate Hours 1,609.2 23 Average Flat Rate Hours Per Customer R.O.	2.64						

#### FIGURE 12B

Based on our history of service visits we can determine what percent of the vehicles offered us menu opportunities. In this example we will use 40% (Figure 12a, Item #4). Of these menu opportunities, the NCM training and consulting teams have learned that well-trained and motivated service advisors, supported with fairly-priced and well documented service menus, will close between 30% and 40%. In this example we will use 35% (Figure 12a, Item #6). Finally, we need to input the average number of flat rate hours per menu sold, which in this example is 2.6 (Figure 12a, Item #8).

The NCM training and consulting teams have learned that well-trained and motivated service advisors, supported with fairly-priced and well documented service menus, will close between 30% and 40% of menu opportunities.

The third group of numbers (Figure 12a, Items #10 and #12) details the expected metrics from the sale of "today's special." The example assumes a sales penetration level of 20%, with an average flag time for these specials of 0.8 flat rate hours. The NCM training and consulting teams have determined that these expectations are realistic.

The final group of numbers (Figure 12a, Items #14, #16, #18, and #20) represent the expected metrics from our vehicle inspection or "additional service request" (ASR) initiative. In most sales-effective service departments, this ASR process will by far account for the greatest amount of direct customerpaid hours. An inspection should be performed on every vehicle with 15,000 miles or more on the odometer. Some dealers even begin doing inspections at the first service visit.

In this example, we assume that technicians will inspect 85% (Figure 12a, Item #14). Of the vehicles inspected, technicians will generate an ASR on 60% (Figure 12a, Item #16). The average ASR will include recommended operations totaling 3.5 flat rate hours (Figure 12a, Item #18). The service advisor staff will close 40% of the ASR recommendations. (Figure 12a, Item #20) The NCM training and consulting teams have determined that these expectations are realistic.

In most sales-effective service departments, this ASR process will by far account for the greatest amount of direct customer-paid hours. An inspection should be performed on every vehicle with 15,000 miles or more on the odometer. Some dealers even begin doing inspections at the first service visit.

The overall transactional quality for customer-paid labor is displayed in Figure 12a, Item #23. This example produces 2.64 hours per repair order, which would be realistic for the main shop of a saleseffective Toyota store.

Once a satisfactory transactional quality has been developed, along with the documentation of the processes to support that quality, we next need to focus on transactional "quantity" (or Customer Repair Order Count). Referring now to Figure 12b, we must enter test numbers into Item #1, until the number displayed in Item #22 (Total Projected Customer-Paid Flat Rate Hours) closely matches our Available Inventory. The final results in Figure 12b demonstrate the following:

610 customer-paid R.O.s (Item #1) at 2.64 Hours per R.O. (Item #23) will produce 1,609.2 total customer-paid flat rate hours for the month (Item #22), against 1,611.8 flat rate hours available (our inventory) for customer-paid labor sales (Figure 11, Item #15).

Once more, we recommend that the individual metrics shown in Figure 12b be measured, reported, inspected, and managed on at least a weekly and MTD basis.

# **Determining the Right Service Advisor Staffing Level**

Dealership sales mathematics applies to Service Advisors (or Assistant Service Managers [ASMs]) as well as Vehicle Sales Consultants. Unless staffing levels for ASMs are properly established and maintained, productivity, sales, customer satisfaction and retention, and employee satisfaction and retention can be adversely affected.

Unless staffing levels for ASMs are properly established and maintained, productivity, sales, customer satisfaction and retention, and employee satisfaction and retention can be adversely affected.

As an example, let's look at how we should staff the main shop at ABC Toyota with ASMs. There are really only two questions to be answered when making our ASM staffing decision:

- 1. How many flat rate hours should each ASM bill per month?
- 2. How many "customer interfaces" can an ASM effectively handle?

Under the circumstances (that we NCM trainers and consultants try to create), an ASM should be able to direct, and dispatch to, four technicians. If those technicians perform to the NCM best practices guideline, their average production will be 200 flat rate hours per month. That means that, at a 1:4 ASM to technician ratio, each advisor would be responsible and accountable for billing approximately 800 flat hours per month.

In our ABC Toyota example (referring back to Figure 11), we projected 821.0 warranty flat rate hours and 1,611.8 customer-paid flat rate hours, for a total of 2,432.8 flat rate hours involving customer interface. That would suggest that we need three ASMs to handle the combined warranty and customer-paid business categories. Since there are no significant customer interfaces required for handling the internal" business category, one ASM should be able to effectively handle all of the 918.5 flat rate hours of internal labor.

Before finalizing our ASM staffing decision for the warranty and customer-paid business categories, we need to determine how many customer interfaces will be required and whether three ASMs is still the correct number. One of the things that the NCM training and consulting professionals have learned (the hard way) over the years is that, with rare

exceptions, the average ASM cannot effectively handle more than 15 customer interfaces per day.

How do we determine the number of ASM customer interfaces that will be required at the main shop of ABC Toyota? We have to start by knowing the ASM's "work month," that in this example we'll assume is 21.5 days.

That means, with three ASMs, we'll have 64.5 (3 x 21.5) ASM days available.

From Figure 12b, we know that we need to

write 610 customer-paid repair orders, and each of those R.O.s represents a customer interface. But how many customer interfaces are represented by the 821.0 warranty flat rate hours? We need to review our warranty claims register (or the manufacturer-provided monthly Warranty Claims Analysis) and determine how many average warranty flat rate hours we write per warranty R.O. We'll assume

that, in this example, ABC Toyota writes 1.5 hours per warranty R.O. That means the service department writes approximately 547.3 (821.0 ÷ 1.5) warranty R.O.s per month.

But does each warranty R.O. represent a separate customer interface? No, because a warranty R.O. could also have customer-paid labor on it, and vice versa. (Yes, that's right...most of our DMS systems double count an R.O. if it includes both warranty and customer-paid labor.) So we next need to query our DMS and determine what percentage of our warranty R.O.s are warranty only, because each one of those will represent a separate customer interface. Let's assume that, in this example, 50% of the warranty R.O. count is warranty only.

We now have approximately 884 customer interfaces...610 customer-paid and 274 (547.3  $\,$ x 50%) warranty-only. That then calculates to 13.7 customer interfaces per ASM per day (884  $\div$  64.5), which is less that our maximum guideline of 15. Therefore, we know that we should be able to

effectively staff the main shop at ABC Toyota with a total of four ASMs.

#### **Mathematics for the Express Service Center**

Those dealers who have invested in, and committed to becoming successful at, the Express Service

business enjoy a strong marketing advantage. Not only do they have an increased ability to provide convenient, competitively priced services to owners of vehicles within their franchise, they have the opportunity to provide express

service to, and possibly convert, owners of other vehicle makes. The better Express Service operators generate total R.O. sales in excess of \$100.00 per transaction. But as with the other profit centers we've been discussing, this performance level

The better Express Service operators generate total R.O. sales in excess of \$100.00 per transaction. But as with the other profit centers we've been discussing, this performance level doesn't "just happen;" it is the result of effectively practicing the 6 elements of Accountability Management, the first of which, "Planning Your Work, and Working Your Plan," involves understanding and applying sales mathematics.

One of the things that the NCM training and

consulting professionals have learned (the

hard way) over the years is that, with rare

effectively handle more than 15 "customer

exceptions, the average ASM cannot

interfaces" per day.

doesn't just happen; it is the result of effectively practicing the 6 elements of Accountability Management, the first of which, *Planning Your Work, and Working Your Plan*, involves understanding and applying sales mathematics.

To demonstrate how these mathematical principles impact the Express Service Center at our sample dealership, ABC Toyota, let's turn our attention to Figure 13. This department at ABC Toyota interfaces with an average of 42 OTDBs per day, approximately 90% of whom request a Lube, Replace Oil and Filter (LOF) as their prime item.

What additional service operations should be aggressively marketed or offered? In Column 2 of Figure 13, we have listed the top 20 operations, by percentage, which customers of independent service centers purchased in 2010, as reported in <a href="National Oil & Lube">National Oil & Lube</a> magazine.

If these percentages were applied to the available express service R.O. count at ABC Toyota, the number of respective transactions for each operation

	Monthly Flat Billing Projection									
	Express Service	Cent			yota	- Ma	ay 201	1		
	Daily Customer Count	42	Days	s Open	<b>26</b>	N	Mtly. R.O.	Count	1,092	
	1	2	3	4	5	6	7	8	9	
С	escription Of Labor Operation	WHO PURCHASE	Transactions	F F L O A R T O R P A E T R A T H O U N R S	TOTAL FLAT RATE HOURS PER MONTH	AVG. ELR PER OP. CODE	EST. AVG. MONTHLY LABOR SALES	EST. AVG. GROSS PROFIT MARGIN	EST. AVG. GROSS MONTHLY GROSS PROFIT	
1	Lube, Replace Oil and Filter	90.0%	983	0.3	294.9	\$40.00	\$11,796	60.0%	\$7,078	
2	Smog/Emission Test	19.5%	213	0.5	106.5	\$60.00	\$6,390	65.0%	\$4,154	
3	Check Battery	15.7%	171	Free						
4	Replace Air Filter	13.7%	150	0.3	45.0	\$50.00	\$2,250	60.0%	\$1,350	
5	Replace Tires	12.3%	134	0.5	67.0	\$50.00	\$3,350	60.0%	\$2,010	
6	Replace Windshield Wipers/Blades	8.0%	87	Free						
7	Replace Lamps/Lights/Bulbs	6.2%	68	0.4	27.2	\$50.00	\$1,360	60.0%	\$816	
8	Rotate Tires	5.8%	63	0.4	25.2	\$50.00	\$1,260	60.0%	\$756	
9	Minor Mechanical Repairs	5.8%	63	0.5	31.5	\$60.00	\$1,890	65.0%	\$1,229	
10	Wheel Balance	4.5%	49	0.9	44.1	\$70.00	\$3,087	70.0%	\$2,161	
11	Replace Cabin Air Filter	3.8%	41	0.6	24.6	\$60.00	\$1,476	65.0%	\$959	
12	Replace Fuel Filter	3.4%	37	0.6	22.2	\$60.00	\$1,332	65.0%	\$866	
13	Recharge Air Conditioner	3.0%	33	0.9	29.7	\$70.00	\$2,079	70.0%	\$1,455	
14	Replace Bake Pads/Shoes	2.8%	31	1.3	40.3	\$70.00	\$2,821	70.0%	\$1,975	
15	Mechanical ATF Exchange	2.8%	31	1.1	34.1	\$60.00	\$2,046	65.0%	\$1,330	
16	Repair Windshield Chips	2.5%	27	0.5	13.5	\$60.00	\$810	65.0%	\$527	
17	Differential Service	2.3%	25	0.4	10.0	\$60.00	\$600	65.0%	\$390	
18	Power Steering Flush	2.2%	24	0.5	12.0	\$70.00	\$840	65.0%	\$546	
19	Water-Repellant Glass Treatment	2.2%	24	0.3	7.2	\$40.00	\$288	60.0%	\$173	
20	Drain and Refill Radiator	1.9%	21	0.6	12.6	\$70.00	\$882	70.0%	\$617	
21	Express Service Center	Totals	2,275	0.3726	847.6	\$52.57	\$44,557	63.7%	\$28,390	
22	Metrics Per Repair	Order	2.08		0.78		\$40.80		\$26.00	

FIGURE 13

displays in Column 3. When multiplying the transaction count by the estimated flat rate hour times per operation in Column 4, the total flat rate hour production per operation is calculated in Column 5. The mathematics displayed in these columns result in the planned production of 847.6 total flat rate hours at this Express Service Center in May, 2011.

The remainder of Figure 13 is devoted to estimating the effective labor rate for each operation and then calculating the projected labor sales and gross profit, both for each operation and for the entire department.

The resulting number for total department labor sales, \$44,557 (Column 7, Row 21) should be enough to impress anyone. The annualized labor sales, in excess of a half million dollars, goes a long way to recovering unrealized service market potential.

Several key metrics for the Express Service Center are displayed in Row 22.

- 1. 2.08 Operations per R.O.
- 2. 0.78 Flat Rate Hours per R.O.
- 3. \$40.80 Labor Sales per R.O.
- 4. \$26.00 Labor Gross per R.O.

The NCM training and consulting teams have determined that these projected metrics are realistic. As usual, we recommend that the individual metrics shown in Figure 13 be measured, reported, inspected, and managed on at least a weekly and MTD basis. The departmental staffing plan is very important to attaining the metrics discussed above. The NCM field teams have had great success maximizing express service sales and production by implementing a "pure team" organizational structure.

In this example, assuming that the express service center at ABC Toyota is open for business about 60 hours per week, we would probably recommend staffing the department with one B skilled technician, one C skilled technician, and three D skilled technicians. Under the team structure, each technician would then have planned compensation in May, based on 169.5 flat rate hours. Two service advisors (ASMs) should easily be able to direct the

technician staff and each handle approximately 21 customer interfaces per day.

#### **Collision Center Sales Mathematics**

Today, well less than half of the franchised dealerships in the U.S. have a Collision Center, and of those that do, probably no more than 50% could

The NCM field teams have had great success maximizing express service sales and production by implementing a "pure team" organizational structure.

be considered "highproduction" shops. Since the metrics we'll

be discussing relate only to the high-production shop, this section will be short, to avoid the risk of boring more than 75% of the target audience of this eReport.

The metrics and the resulting sales mathematics are very important; however, they are made even more so by the prevalence of the "Direct Repair Provider" (DRP) initiatives by the insurance companies. There is no disagreement that the insurance industry now commands the collision repair industry. So, for a franchised dealer to compete effectively in this business today, he must be very focused on insurance sales metrics, as well as other collision center metrics.

There is no disagreement that the insurance industry now commands the collision repair industry. So, for a franchised dealer to compete effectively in this business today, he must be very focused on insurance sales metrics, as well as other collision center metrics.

# **Calculating Your Collision Center Market Potential**

Determining market potential has become more art than science. Although the repair frequency (number of accidents), and the resulting repair potential, is still predictable, the DRP programs have a significant impact on a dealer's market potential.

Let's first look at repair frequency and potential. Your "fair share" portion will be calculated using your owner base in your local market. Since we've already done this calculation for the sample Service Department, let's use the same information. In Figure 9, we determined that the number of Units in Operation, or UIOs, in our market was approximately 6,540 vehicles. The metric for repair potential (based on historic accident frequency and severity) is four flat rate hours per UIO per year, or in this example, 26,160 flat rate hours. Applying an average effective labor rate of \$38.00 produces a collision center annual market potential (*labor only*) of \$994,080.

A high-production body shop's fair-share of that market is probably 70%-80%. However, because of the way DRPs are assigned, combined with the relative "aggressiveness" of the collision centers in the market, NCM training and consulting teams have confirmed some of their client-dealers' actual percent of potential ranging from 40% to 200%.

# Matching Shop Capacity Against Sales Potential

Let's assume that our sample Collision Center can realistically obtain its fair share (75%) of the market potential from the dealership owner base. The owner base would provide 2,180 flat rate hours per month (26,160 hours annually  $\div$  12 months); the dealership collision center should then sell 1,635 flat rate hours per month (2,180 x 75%).

How many body shop technicians will be required to produce an average of 1,635 flat rate hours per month? An Excel worksheet, similar to that displayed in Figure 10, can be used to assist with this determination. But for now, let's use the following metrics to calculate staffing:

- 1. One paint technician for every two metal technicians.
- 2. 325 flat rate hours per paint technician per month.
- 3. 250 flat rate hours per metal technician per month.

Applying the above metrics to the required monthly capacity of 1,635 total flat rate hours results in staffing the shop with four metal technicians (who should be able to produce approximately 1,000 flat rate hours), and two paint technicians (who should be able to produce approximately 650 flat hours).

Applying the above metrics to the required monthly capacity of 1,635 total flat rate hours results in staffing the shop with four metal technicians (who should be able to produce approximately 1,000 flat rate hours), and two paint technicians (who should be able to produce approximately 650 flat hours).

How many estimators, or assistant body shop managers (ABMs), will be required? Let's first calculate our planned monthly labor sales by multiplying our target flat rate hour sales by our effective labor rate. The result produced is \$62,130 (1,635 x \$38.00) of monthly labor sales. The NCM training and consulting professionals know that, in those collision centers that exhibit best practices, labor sales will never exceed 50% of total shop sales.

Applying this metric, we can determine that the total monthly collision center sales should approximate \$124,260 (\$62,130 ÷ 50%). Our final collision center productivity metric states: An estimator, or ABM, should be accountable for \$125,000 to \$150,000 in total monthly collision center sales.

Based on this metric, one ABM should be able to achieve the sales target of \$124,260.

The NCM training and consulting professionals know that, in those collision centers that exhibit best practices, labor sales will never exceed 50% of total shop sales.

# Other Important Collision Center Sales Metrics

Following are the remaining metrics that need to be considered within the sales mathematics of a dealership collision center.

- 1. Since 65% of owners are predisposed to have their selling dealer fix their car, the Closing Ratio (or "batting average") should be at least 65% of estimates written by the collision center (or prewritten by the insurance adjusters). With certain franchises, (Toyota, Honda, Mercedes-Benz, etc.) the percentage should be closer to 80%.
- 2. 90% of all jobs should have "supplemental estimates" written.
- 3. Parts sales should represent no less than 40% of total body shop sales.
- 4. Paint and materials should represent no less than 10% of total body shop sales.
- 5. The average total job sale today is \$1,750 \$2,000.
- 6. Cycle times (based on total job sales):
  - Less than \$1,400 one to two days
  - \$1,400 to \$2,500 three days
  - \$2,500 to \$3,500 four days
  - \$3,500 to \$5,500 five to six days

#### Parts Department Sales Mathematics

There are two separate categories of sales, mathematics, and metrics in the Parts Department, defined as follows:

- Back Counter Transactions involving the acquisition of parts by a Service, Express Lube, or Collision Center Technician.
- Front Counter Transactions involving the sale of parts directly to a wholesale or retail customer.

We will discuss each of these categories separately in this section.

#### **Back Counter Parts: Sales and Metrics**

The metric used by most dealers when measuring performance in this area has always been, and continues to be, Parts Sales to Labor Sales ratio. While this metric may be fine for comparing current performance to past performance (or planning future performance against current performance), it is flawed when attempting to compare performance to other dealers, or against best industry practices.

The Parts Sales to Labor Sales ratio is a flawed metric for two reasons: a) it ignores the difference in the effective labor rate (ELR) within any dealer to dealer comparison; b) it ignores the difference in parts gross profit margin (GPM) within any dealer-to-dealer comparison. These differences can be significant, even within the same geographic area.

Why? The Parts Sales to Labor Sales ratio is a flawed metric for two reasons: a) it ignores the difference in the effective labor rate (ELR) within any dealer to dealer comparison; b) it ignores the difference in parts gross profit margin (GPM) within any dealer-to dealer-comparison. These differences can be significant, even within the same geographic area.

planning. For each of the Back Counter sales categories, this planning tool employs the metric recommended above. Columns 6 and 9 illustrate this metric for each individual Back Counter Parts sales category and as an average for all categories (Row 9). It should be noted that Paint Labor Flat Rate Hours are excluded from the metric for Body Shop parts sales.

Mon	Monthly Parts Department Sales and Gross Profit Planning Back Counter - ABC Toyota - May, 2011											
4		Current	Month	ly Perfo	rmance		Pi	ojected	d Montl	nly Perf		
•	2	3	4	5	6	7	8	9	10	11		

1			Current	Month	ly Perfo	rmance		Pr	Projected Monthly Performance					
	'		3	4	5	6	7	8	9	10	11	12	13	
F	Parts Sales Category	Total Sales Amount	Total Gross Profit Amount	Total Cost of Parts Sales (COS)	Total Billed Flat Rate Hours	COS Per Flat Rate Hour	GРM	Total Billed Flat Rate Hours	COS Per Flat Rate Hour	Total Cost of Parts Sales (COS)	GPM	Total Sales Amount	Total Gross Profit Amount	
1	R.O. Customer-Paid	\$79,774	\$27,663	\$52,111	1,477.3	\$35.27	34.7%	1,611.8	\$36.50	\$58,831	37.5%	\$94,129	\$35,298	
2	R.O. Warranty	\$44,428	\$12,172	\$32,256	821.0	\$39.29	27.4%	821.0	\$39.25	\$32,224	27.5%	\$44,447	\$12,223	
3	R.O. Internal - New Vehicle Accessories	\$12,714	\$2,866	\$9,848	195.6	\$50.35	22.5%	227.5	\$50.00	\$11,375	22.5%	\$14,677	\$3,302	
4	R.O. Internal - Used Vehicle Reconditioning	\$15,889	\$4,910	\$10,979	543.2	\$20.21	30.9%	575.0	\$22.50	\$12,938	35.0%	\$19,904	\$6,966	
5	R.O. Express Service	\$39,333	\$14,445	\$24,888	796.1	\$31.26	36.7%	847.6	\$33.00	\$27,971	37.5%	\$44,753	\$16,782	
6	R.O. Body Shop (Based on Metal Labor)	\$44,371	\$12,177	\$32,194	922.0	\$34.92	27.4%	990.0	\$53.00	\$52,470	30.5%	\$75,496	\$23,026	
7	R.O. Tires (Based On Items #1, #4, and #5)	\$29,285	\$5,545	\$23,740	2,816.6	\$8.43	18.9%	3,034.4	\$8.50	\$25,792	19.5%	\$32,040	\$6,248	
8	R.O. Gas, Oil, Grease (Based On Items #1, \$4, and #5)	\$13,445	\$4,221	\$9,224	2,816.6	\$3.27	31.4%	3,034.4	\$3.25	\$9,862	31.5%	\$14,397	\$4,535	
9	Totals	\$279,239	\$83,999	\$195,240	4,755.2	\$41.06	30.1%	5,072.9	\$45.63	\$231,462	31.89%	\$339,844	\$108,382	

FIGURE 14A

Consequently, the only metric that makes sense is Cost of Parts Sales (COS) per Flat Rate Hour, because this metric ignores the differences in ELR and parts GPM. Furthermore, this metric gives consideration to the consistencies in flat rate hours per operation code, specific parts required per operation code, and the uniformity of dealer parts cost within a specific franchise.

Figure 14a displays an Excel worksheet used to assist with Back Counter Parts sales and gross profit

The overall average metric, including tires and gas, oil, and grease, on Row 9 is \$41.06 for current operations and \$45.63 for planned operations. The NCM training and consulting teams have significant experience in assisting dealer-clients to similarly increase this performance metric. As usual, we recommend that the individual metrics shown in Figure 14a be measured, reported, inspected, and managed on at least a weekly and MTD basis.

#### Front Counter Parts: Sales and Metrics

There are four important metrics to measure and manage in order to maximize Front Counter parts sales:

The NCM training and consulting teams have determined that these projected metrics are realistic. We continue to recommend that the individual metrics shown in Figure 14b be measured, reported, inspected, and managed on at least a weekly and MTD basis.

	Monthly Parts Department Sales and Gross Profit Planning Front Counter - ABC Toyota - May, 2011												
	4		Current	Month	ly Perfo	rmance		Projected Monthly Performance					
	1	2	3	4	5	6	6		8	9	•	10	11
Parts Sales Category		(COS) Total Cost of Parts Sales [Sales Minus Gross]	Number of Phone Inquiries, eMail, and Fax Requests	Number of Counter Tickets Written	Closing Rate	COS and Counter	-	Number of Phone Inquiries, eMail, and Fax Requests	Closing Rate	Number of Counter Tickets Written		d COS Per er Ticket	(COS) Total Cost of Parts Sales [Sales Minus Gross]
1	Wholesale "Hard Parts" - Mechanical	\$54,317	437	355	81.2%	\$153.01	16.5%	455	85.0%	387	17.0%	\$155.00	\$59,946
2	Wholesale "Soft Parts" - Sheet Metal	\$89,332	189	167	88.4%	\$534.92	22.8%	200	90.0%	180	23.5%	\$550.00	\$99,000
3	eParts - Wholesale and Retail	\$17,316	261	128	49.0%	\$135.28	9.5%	275	55.0%	151	10.0%	\$140.00	\$21,175
4	Counter-Retail Parts	\$11,117	254	119	46.9%	\$93.42	35.5%	260	65.0%	169	38.5%	\$100.00	\$16,900
5	Parts Boutique	\$8,945	135	112	83.0%	\$79.87	23.0%	150	87.5%	131	25.0%	\$85.00	\$11,156
6	Totals	\$181,027	1,276	881	69.0%	\$205.48	20.9%	1,340	76.0%	1,018	22.2%	\$204.45	\$208,178

#### FIGURE 14B

- The number of parts inquiries that are initiated by telephone, fax, internet, and walkin
- 2. The number of counter tickets written, which is a measurement of the number of closes.
- 3. The closing rate, which we define as the number of counter tickets written, divided by the number of parts sales inquiries.
- The average parts cost of sales (COS) per counter ticket.

These four metrics are displayed in the cells with yellow background in the Excel worksheet displayed as Figure 14b.

#### **Parts Department Sales: Staffing Levels**

The total parts department sales and gross for ABC Toyota is summarized in the Excel worksheet displayed as Figure 14c. However, it is important to recognize that without the correct number of well-trained, motivated parts sales professionals, ABC's Parts Department will struggle to meet its sales objectives. (Yes, that's right... we need to perform a couple more mathematical exercises.) There are three best practice guidelines that apply:

	Monthly Parts Department Sales and Gross Profit Planning Total Department - ABC Toyota - May, 2011												
	4		Current Monthly Performance Projected Monthly Performance								е		
	1	2	3	4	5	6	7	8	8 9 10			12	13
F	Parts Sales Category	(COS) Total Cost of Parts Sales [Sales Minus Gross]	Primary Driver of COS	Current Metric	Total Sales	Total Gross Profit	GPM	(COS) Total Cost of Parts Sales [Sales Minus Gross]	Primary Driver of COS	Current Metric	Total Sales	Total Gross Profit	GPM
1	Total of "Back Counter" Transactions	\$195,240	Flat Rate Hours 4,755.2	COS Per Hour \$41.06	\$279,239	\$83,999	30.1%	\$231,462	Flat Rate Hours 5,072.9	COS Per Hour \$45.63	\$339,844	\$108,382	31.9%
1	Total of "Front Counter" Transactions	\$181,027	Counter Tickets 881	COS Per Ticket \$205.48	\$228,743	\$47,716	20.9%	\$208,178	Counter Tickets 1,018	COS Per Ticket \$204.45	\$267,519	\$59,341	22.2%
6	Totals	\$376,267			\$507,982	\$131,715	25.9%	\$439,640			\$607,363	\$167,723	27.6%

FIGURE 14C

- One Parts Back Counterperson can handle 8
   10 mechanical service technicians
- One Parts Back Counterperson can handle up to \$250,000 in total monthly Collision Center sales.
- One Parts Front Counterperson can handle up to \$125,000 in combined front counter parts sales.

We have previously determined that the ABC Toyota Service Department's main shop will be staffed with 16 mechanical technicians and that the Express Service Center will be staffed by five mechanical technicians. Based on our guideline, this total count of 21 mechanical service technicians is too large for two Back Counterpersons, but not large enough for three Back Counterpersons. Before addressing this dilemma, let's move on to the next staffing category.

We previously determined that our Collision Center should produce approximately \$125,000 in total monthly sales. Since our staffing guideline is \$250,000 total monthly body shop sales per Parts Back Counterperson, it would appear that we only need ½ of a counterperson to service the Collision Center. Another staffing dilemma? Maybe not!

It looks like one solution could apply to both staffing dilemmas. Let's have two dedicated Back Counterpersons service the mechanical technicians' parts counter and let's have one multi-tasking Back Counterperson divide his time equally between the Collision Center and the mechanical technicians' parts counter. Or, maybe even better, it might be logistically possible to have one Back Counterperson be equally dedicated to both the Collision Center and the Express Service Center.

Based on the math (\$267,519 in sales ÷ \$125,000 sales per counterperson), staffing the Front Counter will be relatively easy, assuming that the two counterpersons required are willing to, and capable of, multitasking between the five Front Counter sales categories.

#### % Margin vs. % Mark-up

Any discussion of Parts Department sales mathematics would be incomplete without addressing the difference between margin and markup. Percent (%) Margin is defined as Gross Profit divided by Sales, expressed as a percentage. Percent (%) Mark-up is defined as Gross Profit divided by Cost of Sales, expressed as a percentage. For some reason, dealership managers and employees have a difficult time comprehending this concept, particularly the mathematical relationship between the two metrics. The importance of understanding how to determine markup cannot be overemphasized. In order to achieve your target margin, those responsible for departmental pricing must know how much a product or service must be marked-up. The application of this concept in Variable Operations is rare, primarily because margins are embarrassingly low, compared to those in Fixed Operations. Through recent history, managers and employees in the variable operating departments have become far more comfortable using "\$PVR," rather than margin as a gross profit performance metric.

The importance of understanding how to determine mark-up cannot be overemphasized. In order to achieve your target margin, those responsible for departmental pricing must know how much a product or service must be marked-up.

#### **Understanding Mark-Ups and Margins**

<u> </u>									
Mar	k-Up	Margin							
Pricing an item at	Is the same as	And results in a							
"Cost Plus"	"Multiplying Cost By"	"Gross Profit Margin Of"							
10.00%	1.100	9.09%							
20.00%	1.200	16.67%							
30.00%	1.300	23.08%							
40.00%	1.400	28.57%							
50.00%	1.500	33.33%							
75.00%	1.750	42.86%							
100.00%	2.000	50.00%							
125.00%	2.250	55.56%							
150.00%	2.500	60.00%							
175.00%	2.750	63.64%							
200.00%	3.000	66.67%							
225.00%	3.250	69.23%							
250.00%	3.500	71.43%							
275.00%	3.750	73.33%							
300.00%	4.000	75.00%							
325.00%	4.250	76.47%							
To Calculate Your "	Multiple" and "Margin"	From "Cost Plus"							

To Galiatic Tour manapic and margin Trom Gost has											
"Cost Plus"	"Multiple"	"Gross Profit Margin"									
75.00%	1.75	42.86%									
To Calculate Your "Cost Plus" and "Margin" From a "Multiple"											
"Cost Plus"	"Multiple"	"Gross Profit Margin"									
45.00%	1.45	31.03%									

To Calculate Your	Cost Plus	and munipie	ru	a Desired	wargiii	
"Cost Plus"		"Multiple"		"Gross P	rofit Mar	gin"
49.99%		1.50		33	3.33%	

To Coloulate Value II Coat Divall and IIM ultimol Fay a Desired IIM excipt

#### FIGURE 15

During my career as a training and consulting professional, I have been diligent, though with very little success, in attempting to teach the mathematical relationship between margin and markup. I now defer to a Microsoft Excel application (displayed as Figure 15) when assisting clients to determine how much to mark-up a service or product. The sections at the bottom of the worksheet (highlighted in yellow) allow for easy input (one entry) and quick results, when performing the necessary calculations of these metrics.

#### **Overall Summary of Dealership Sales Mathematics**

You should now agree, based on the mathematics presented and discussed for each of the dealership operating departments, that generating sales is truly, "all about the numbers." In concluding this eReport, however, I have decided to present a very simplistic analysis, displayed in Figure 16. This Excel worksheet illustrates that there is a mathematical "umbrella," under which there are really only five ways to increase dealership sales and gross. Each of these five scenarios indicates the relationship between just two variables, Cost of Sales (COS) and Gross Profit Margin (GPM).

Scenarios #1 and #2 present the easiest strategies to implement and execute, because each involves increasing only one of the two variables. Scenario #3 is a more difficult strategy, because it involves increasing both variables. The strategies presented in scenarios #4 and #5 carry a significant downside risk. The NCM training and consulting teams advise managers at client dealerships to undertake those strategies in scenarios #4 and #5, only if, they have a current, well-prepared résumé available and ready to distribute.

	The Umbrella of Sales Mathematics:								
5 Ways to Increase Sales and Gross Profit									
	<b>Description of Scenario</b>	cos	GPM	Sales	Gross				
	Base Level of Dealership Operations	\$4,000,000	12.5%	\$4,571,429	\$571,429				
	Methods To Increase Sales								
1	Sell More Merchandise (COS) Same GPM	\$4,150,000	12.5%	\$4,742,857	\$592,857				
2	Sell Same Merchandise (COS) Higher GPM	\$4,000,000	13.5%	\$4,624,277	\$624,277				
3	Sell More Merchandise (COS) Higher GPM	\$4,150,000	13.5%	\$4,797,688	\$647,688				
4	Sell Less Merchandise (COS) Much Higher GPM	\$3,850,000	16.5%	\$4,610,778	\$760,778				
5	Sell Much More Merchandise (COS) Lower GPM	\$4,500,000	11.5%	\$5,084,746	\$584,746				

FIGURE 16

The purpose of this eReport is to provide a detailed description of the consequential metrics associated with selling both vehicles and service at your auto dealership. Now that you know what the numbers are, or rather, what they <u>should</u> be, your next challenge is to execute. For more information regarding best practice guidelines from the experts on the NCM training and consulting teams, please visit our website at www.ncminstitute.com.

#### About the Author

Garry House is the director of NCM Institute and also a consultant with the NCM Retail Operations team. Mr. House has a half century of experience in the automotive industry. His retail career at Glenn Wilson Buick-Oldsmobile-GMC in the Flint, Michigan market included



assignments as sales consultant, used vehicle manager, sales manager, fixed operations director, general manager, and dealer principal. During his career in management training and consulting, Mr. House has worked with more than 500 dealerships. His client-dealer experience has involved "A-Z" departmental process development and implementation, disciplines for accountability management, sales and management compensation planning, dealership acquisition analysis, and multi-store management practices.

Garry resides in Jupiter, Florida, with his wife, Sheryl. He can be contacted at (561) 339-8080 or <a href="mailto:ghouse@ncm20.com">ghouse@ncm20.com</a>.

Re-Tweet, Like or Recommend this eReport!





