

# RETAILMATH

5th Edition

## MADE SIMPLE



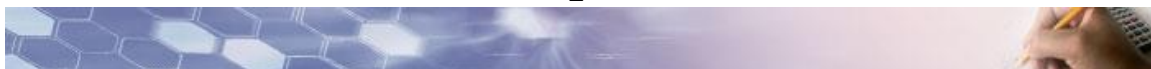


**5<sup>th</sup> Edition**

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## RETAIL MATH – MADE SIMPLE

### INTRODUCTION

#### **5 Reasons why you need Retail Math training:**

- 1** What are the important metrics?
- 2** How to measure those metrics?
- 3** What are the top KPI's (Key Performance Indicators)?
- 4** Formulas
- 5** Balanced Score Cards for Retail Management

#### **Who should be trained on Retail Math?**

-  All levels of retail management
-  Suppliers to retailers

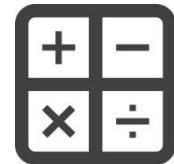
Some critical decisions, affecting retail operations at any level, are misunderstood by some personnel. In many cases, even when havoc is created, had the decision been understood it would have alleviated much frustration; allowing the retail managers to pass the information on to their staff in an intelligent fashion.





When understanding is lacking people have no alternative but to put their own ideas and perceptions into play; into the forefront. Unfortunately, this is not usually productive and often the point of the exercise or the result desired doesn't have a chance of success.

To many retail managers a 'bad' decision made, an 'unproductive' process put into place or an 'unbelievable' policy implemented simply confirms, to them, that Head Office personnel need to spend more time in the stores so they can see what's really going on. Of course, this may sometimes be true – many Head Office employees would benefit tremendously by spending more time in the stores and retail companies should insist that their Head Office employees spend a specified amount of time in stores every month. However, the truth is that most Head Office employees do know what they're doing. Decisions affecting your retail operation, good or bad, usually have some analysis behind them. And, usually, that analysis involves retail math.



Understand some retail math and you shall have new insight into what is going on around you.

We are not suggesting that all retail employees must be made aware of the details behind every decision. That would be unreasonable and unnecessary. What we are suggesting is that people should be given the information that makes sense to them; information that will help them to understand how their working world turns. The goal should be to avoid confusing people, avoid the problems associated with unsubstantiated rumors and help people to draw correct conclusions.

So here you are. You have decided to learn something about retail math in order to become more adept at understanding how your whole business operates and, more importantly how to interpret what is going on so you can communicate positively to your staff.

You and your staff are, after all, the people meeting with the customer every day and you all need to be 'in the loop' to some extent.

Great! Let's get started...







## GLOSSARY of TERMS

Although it is the norm to provide a 'Glossary of Terms' at the end of a book, we believe it will be more useful to the reader to have an understanding of some of the terms used before they see them as part of a calculation.

Here they are:

### Accounts Payable:

The amount **owing to** suppliers of merchandise and/or services that were purchased 'on account'.

### Accounts Receivable:

The amount that **others owe you** to pay for merchandise and/or services that were purchased 'on account'.

### Average Sale per Customer OR Average Sale per Transaction

The average dollar amount of one sale to one customer OR the average dollar amount of one sale in one transaction. These are the same but may be expressed differently. One transaction is deemed to be associated with one customer.

### Conversion Rate:

The rate at which customers coming into the store are converted into buying customers.





### **Current Assets:**

This is a classification shown on the Balance Sheet. Current Assets include cash, inventory and accounts receivable. Current Assets are considered to be quite liquid which means that they can be readily converted to cash. Other assets, such as properties, fixtures, etc. are considered Fixed Assets and cannot be converted to cash nearly as quickly as Current Assets. Fixed Assets are shown as a separate classification on the Balance Sheet.

### **Current Liabilities:**

Any debt owing during the current period. This would include Accounts Payable to suppliers of merchandise and/or services and loans; usually bank loans.

### **Customer Traffic:**

This is simply the number of people passing through the doors of the retail store. Some companies install traffic counters to count the people coming and going. The traffic counter is usually set high enough to avoid counting the children coming through the doors as they cannot reasonably be expected to make a purchase, depending on the business of course. Information is taken from the traffic counter and downloaded – usually to the Head Office via polling – and is then used to make specific calculations regarding conversion rates.

### **Discounts Taken:**

Suppliers of merchandise and/or services generally offer special discounts to reward the retailer for paying their invoices quickly or for buying large





quantities. There can be other discounts available and retailers would negotiate terms with the supplier before placing their orders.

### **FTE Employee:**

FTE stands for Full Time Equivalent. Many retailers hire few full time staff members and many part time staff members. In order to work with certain indicators, or measures, it is necessary to standardize. For instance, if a full time employee regularly works forty hours per week and part time employees work only 20 hours it would take two part time employees to make a Full Time Equivalent, or FTE.



### **Gross Margin:**

Net Sales minus Cost of Goods Sold, also referred to often as COGS. The Cost of Goods Sold includes the cost as stated on the invoice as well as any applicable warehousing or distribution costs directly attributable to the merchandise.

### **Inventory Carrying Costs:**

Any costs incurred as a result of possessing the inventory. These include, but are not limited to: cost of the space used for storage, cost of handling the inventory, interest owed on the investment, cost of insuring the inventory.

### **Liquidity:**

The ability to generate cash quickly. This includes converting assets to cash quickly.





### **Markdowns:**

Reduction of selling price. This is generally done to help move, or sell, merchandise that is not moving quickly enough at the first price (cost plus initial retail markup).

### **Net Profit:**

Total income minus total expenses.

### **Net Sales:**

Gross sales minus any returns and allowances given.

### **Number of Transactions:**

The total number of transactions processed. One sale to one customer is considered to be one transaction.

### **Occupancy Cost:**

All costs incurred as a result of occupying a property. These include, but are not limited to: rent, in- store maintenance and common area maintenance, insurance, heat, hydro and other utilities, building/equipment depreciation expense, taxes.





### Operating Cost:

All of the costs to operate the business. The cost of merchandise and any financing costs are not considered operating costs.

### Open to Buy:

The dollar value of merchandise that may be purchased according to pre-determined limits based on sales expectations.

### Returns and Allowances:

The dollar value of merchandise returned by customers.

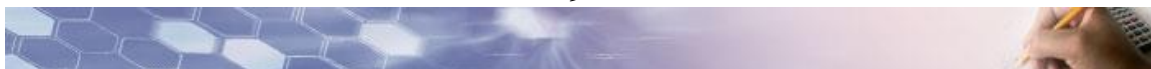
### Shareholders Equity (also referred to as Owners Equity):

The amount of money invested by the individuals who own the business.

### Shrinkage:

Shrinkage is the difference, in dollars, between the amount of inventory on the books (which you **should have**) and the actual physical count (which you **do have**).

Shrinkage is considered to be the result of theft, both internal (employees) and external (shoplifters/thieves), and paperwork errors. Damaged merchandise can also be considered shrinkage but most companies have processes in place to record these damages and the total dollars recorded are used to adjust the shrinkage number.







### Square Feet of Selling Space:

Total square footage of selling space. This does not include backrooms, offices or storage areas. It usually includes fitting rooms, where applicable.

### Stock Keeping Units (also known as SKU's)

A Stock Keeping Unit number, or SKU as it is more commonly referred to, is assigned to each different style, model, color, size, etc. that will be offered for sale.

One chair which is the same as another chair with regard to style, design, selling price etc. but is a different color will be assigned a different SKU. With clothing, there would be a different SKU assigned to each different color and size. This ensures detailed tracking of sales for analysis purposes. For instance, if one color of a particular model or style is selling very quickly, that is the color you want to re-order. It won't help you to re-order a color that is not moving.

### Total Cost of Merchandising:

Costs/expenses directly related to merchandising. Buyer's salaries and related travel expenses, advertising, displays, etc.

### Units Per Transaction (also known as UPT's)

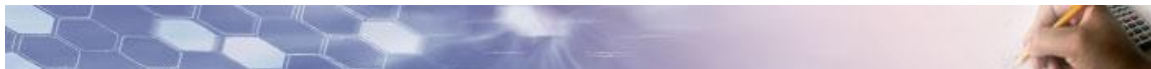
The average number of units (items) purchased in one transaction.





### Wage Cost:

Total cost of payroll. Some companies include employer share of benefit costs in their overall Wage Cost. Wage cost is generally expressed as a percentage of sales.





## KEY PERFORMANCE INDICATORS

Let's take a look at the KPI's, or Key Performance Indicators, that are generally used at store level.

A review of Key Performance Indicators allows management to see, at a glance, how the business is doing. KPI's can be anything deemed important and meaningful to a particular business. In a retail store, they usually include but are not limited to the following:

- ▶ Sales compared to prior year or prior period
- ▶ Sales compared to a previously determined target or budget
- ▶ Sales per square foot of retail space
- ▶ Sales (store) per labor hour – selling hours only
- ▶ Sales (store) per labor hour – all payroll hours
- ▶ Sales (associate) per labor hour
- ▶ Average sale per customer or average sale per transaction
- ▶ Units per customer or units per transaction
- ▶ Conversion rate
- ▶ Wage cost – selling wages only
- ▶ Wage cost – selling and non-selling hours

All of the figures required to make these calculations should be readily available to a Store Manager.





### Sales compared to prior year or prior period:

Comparing current sales results to the sales results of prior periods, whether it is a year, a month or a week, is an activity engaged in by all business owners and managers.

It is a highly relevant comparison provided all contributing factors remain the same. For instance, if a store has undergone a major renovation where additional selling space has been added or where the end result is that the store is much more inviting than it was previously, then it is not necessarily relevant to compare the sales prior to the renovation with the sales after the renovation. Of course, they can still be compared as long as it is noted so that anyone analyzing the information understands there are significant factors contributing to the difference in the results.

But, in the case of a relatively stable economic environment and where no other major changes have taken place, then comparing sales to prior periods can speak volumes. It can identify a management team as being great or not so great; it can identify problems or successes in buying, product flow, inventory levels, merchandising, advertising or customer service delivery. Basically, any significant change in sales achievement, from one period to another, means that something major has happened. It is then up to management to determine what that major thing is and in the case of a problem, address it and in the event of a success, capitalize on it.

$$\begin{aligned} \$ \text{ change} &= \text{Actual sales \$ (current period)} \\ &\quad - \text{Actual sales \$ (prior period)} \end{aligned}$$





$$\% \text{ change} = \frac{\text{Actual sales (current - prior) period}}{\text{Actual sales (prior period)}} \times 100$$

### Sales compared to a previously determined target or budget:

(The terms target and budget are often used interchangeably)

Most sales targets are developed using a prior periods' actual results as a baseline. Having said that however, it should be noted that this is not a hard and fast rule for reasons such as 1) the business has no prior history 2) the prior periods results are deemed to be irrelevant due to any number of reasons – i.e.: perhaps the store was understaffed and/or under stocked for most of the period, or perhaps a substantial renovation took place, or the store changed locations within the same mall, etc.

Many retail chains create targets using actual results from a prior period plus a previously determined percentage. For instance, if a store did \$1,000,000.00 in a prior period and the company decided that a 12% increase could reasonably be expected, the target for the upcoming period would be \$1,120,000.00.

#### **Arriving at the target:**

$$\$1,000,000.00 \times 1.12 = \$1,120,000.00$$

or

$$\begin{aligned} & \$1,000,000.00 \\ & + \$ 120,000.00 \text{ (which is 12\% of \$1,000,000.00)} \\ & = \$1,120,000.00 \end{aligned}$$





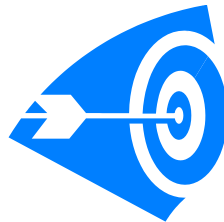


### Comparing actual sales to targeted sales:

**Target** of \$1,120,000.00 – **Actual Sales** of \$1,095,000.00 = \$25,000.00

$$\frac{\$1,095,000.00}{\$1,120,000.00} \times 100 = 97.77\% \text{ achieved}$$

Assuming the target is reasonable and achievable, then a comparison which reveals that the sales are trending above or below target means more investigation is warranted. Again, it could be a signal that something is wrong or, conversely, that things are going much better than expected. Either way, a deviation from target says something to management and having that information is always useful.



### Sales per square foot of retail space

There are widely used standards when it comes to sales per square foot (usually written sales/sq.ft.). When management is considering a new location, a renovation of an existing location, adding more footage to an existing location, etc. they will certainly consider the current sales/sq.ft. when making the decision.





Most retailers will have a benchmark to compare to. If the sales/sq.ft. are extremely high relative to the benchmark it probably means the store has maximized its sales. A larger location is called for. If, on the other hand, the sales/sq.ft. are low relative to the benchmark it could mean that the store is not meeting its potential.

Anytime one is comparing sales per square foot for two or more locations, they must know the size and sales volume of each store. Like anything else, comparing apples and oranges is not fruitful!

$$\begin{array}{r} \text{Sales: } \$ 950,000.00 \\ \text{Store size: } 1900 \text{ square feet} \\ \\ \frac{\$ 950,000.00}{1900} = \$500.00 \text{ sales per square foot} \end{array}$$

### Sales per hour (refers to labor hours used per payroll records)

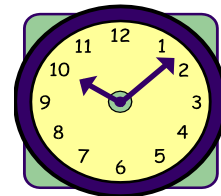
For use in calculating KPI's, this section needs to be broken down. There are several ways to look at sales per hour. It is important to have a standard to measure the results against. The standard needs to be determined by each business as many factors, such as price point, type of merchandise, etc., need to be taken into account.

Breakdown as follows:

**Total Store Sales / Total hours used**

**Total Store Sales/ Selling hours used**

**Individual Sales Associates Sales / Total hours worked by that associate**





This breakdown is necessary to find out how hours used for both selling and non-selling functions are performing. For example, if a Store Manager schedules ineffectively by having a generally good sales associate spend a lot of hours doing non-selling functions that will be revealed in a comparison of the numbers. Similarly, if the Store Manager schedules too many hours for non-selling functions and not enough for selling that will be revealed also.

These KPI's are an excellent source of information to help the Store Manager manage the day-to-day business. The numbers alone will not tell the whole story but they are a very strong indicator of what is going on; they will help you to figure out the big picture. When analyzing performance you need to take many things into account but the important thing is to identify the areas for improvement and then take the steps necessary.

Look at an example where Total Store Sales were \$950,000 and during the same period Total Hours Used were 13,000hours.

### **Sales per hour (store, total)**

Total Store Sales divided by Total Hours Used

$$\frac{\$950,000}{13,000} = \$73.07$$





### Sales per hour (store, selling)

Total Store Sales divided by Selling Hours Used  
(Assume 85% of total hours used were actual selling hours)

$$\frac{\$950,000}{11,050} = \$85.97$$

### Sales Associate Sales per hour

Sales Associates Actual Sales divided by Sales Associate Total Selling Hours Worked  
(assume Associate works 30 hours per week for 50 weeks and sold \$110,000)

$$\frac{\$110,000}{1500} = 73.33$$

In this example, the Associate sold \$73.33 per hour compared with the store average of \$85.97 – remember we are comparing sales per **selling hour** and **not total hours** worked.

### Average Sale per Customer (Average Sale per Transaction)

This is one of those indicators which will show how well the store or associate is doing regardless of traffic flow. Store Managers cannot rely on a constant





flow of traffic to boost their sales. They must rely on the people they have on the selling floor to make the best out of every opportunity.

All it takes is one customer to sell to. If that one customer makes a large purchase it boosts the Average Sale per Customer, meaning that the job was done well.

Conversely, if there are many customers and they are not being properly looked after the Average Sale per Customer will go down because they are not being persuaded to purchase more. However, there are times when the Average Sale per Customer will go down, naturally, as a result of sales and promotions. You need to determine the extent of the decrease expected before judging the associates.

### **Average Sale per Customer**

Sales divided by # of Customers (or Transactions)  
(Daily Sales: \$16,000 made to 186 customers (or transactions))

$$\frac{\$16,000}{186} = \$86.02$$

### **Units per Customer or Units per Transaction**

This is the average number of pieces of merchandise bought by one customer in one transaction. The company develops a standard based on their type of business.







For example, in a Dollar store the average units per transaction could reasonably be 6 or 7, whereas the average units per transaction in a bridal salon would likely be 1 to 1.5.

This KPI indicates whether your promotions and merchandising are having the desired effect and, also, whether your associates are doing a good sales job.

### Units per Transaction

Total # of Units Sold divided by Total # of Transactions  
(300 units sold and 112 customers)

$$\frac{300}{112} = 2.68$$

### Conversion Rate

The rate at which you turn, or convert, customers entering your store into buying customers. This is an important indicator because it speaks volumes about your ability to service your customers. Assuming that the traffic coming in is recorded accurately, a low conversion rate compared to a standard usually means customers are not being looked after. You may be understaffed; you may have the wrong sales associates scheduled during a peak period. There are many reasons for this and the person in the best position to analyze this is the Store Manager.





Of course, there are scenarios where the customer simply does not want what you have to offer but, don't forget that you are comparing to a previously established standard for your store.

### Conversion Rate

Total # of transactions divided by Total # of Customers entering the store

(28 transactions were made and 121 customers entered)

$$\frac{28}{121} \times 100 = 23\%$$

### Wage Cost

The wage, or payroll, expense is one of the largest expenses within the Store Managers control. For Store Managers, wage cost is usually calculated using only gross wages paid rather than total payroll costs as they may not have all of the other information readily available. Gross wages paid is the sum of hours worked times hourly rates for each employee.

Wage cost should be calculated in two ways.

- 1) Using total wages – includes wages of all employees working in the store
- 2) Using selling wages only – includes only wages of selling employees working in the store





The comparison of the two different results will indicate how significantly hours spent on administrative functions or other non-selling functions are affecting your overall wage expense.

### **Wage Cost %**

- 1) Total Wages divided by Total Sales  
(\$6,000 wages and \$67,000 in sales)

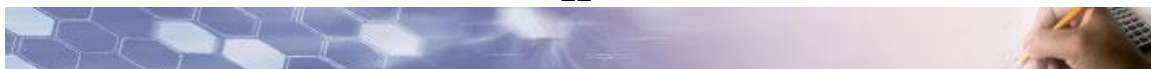
$$\frac{\$6,000}{\$67,000} \times 100 = \mathbf{8.96\%}$$

- 2) Selling Wages divided by Total Sales  
(\$4,300 selling wages and \$67,000)

$$\frac{\$4,300}{\$67,000} \times 100 = \mathbf{6.42\%}$$

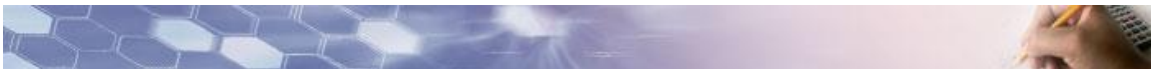
Many of these KPI's can be used for setting goals and targets. For example, if you have a company standard of \$100 sales per hour (per selling associate) and you expect to reach a target of \$9,000 for the day, then you need to schedule 90 selling hours for that day. You would need 12 associates each working 7.5 hours on the selling floor. Each Associate needs to sell \$750.00.

KPI's should be used in conjunction with other data and/or other considerations.





They do not tell you exactly what to do, or give you all the answers, but they are very helpful in many ways. They provide most of the information you need to prepare and deliver performance reviews and evaluations. They provide information which enables you to make valid comparisons with other business units in your company.





## COMMONLY USED FORMULAS (Quick Reference)

❖ ***COST OF GOODS SOLD (COGS) =***

$$\begin{aligned} & \text{BEGINNING INVENTORY} \\ & + \text{PURCHASES} \\ & - \text{ENDING INVENTORY} \end{aligned}$$

❖ ***GROSS MARGIN DOLLARS (GM\$) =***

$$\text{SALES} - \text{COST OF GOODS SOLD}$$

❖ ***GROSS MARGIN PERCENTAGE (GM%) =***

$$\frac{\text{GROSS MARGIN DOLLARS}}{\text{NET SALES DOLLARS}} \times 100$$

or

$$\frac{(\text{SELLING PRICE} - \text{COST})}{\text{SELLING PRICE}} \times 100$$







❖ **\$ *COST* =**

$$\text{\$ } RETAIL \times \frac{100 - GM\%}{100}$$

❖ ***MARK UP* % =**

$$\frac{\text{\$ } RETAIL \times 100}{COST} - 100$$

❖ **\$ *RETAIL* =**

$$\text{\$ } COST \times \frac{(100 + MARK - UP\%)}{100}$$

❖ **\$ *MARKDOWN* =**

$$ORIGINAL RETAIL PRICE - LOWER RETAIL PRICE$$

❖ ***MARKDOWN* % =**

$$\frac{\text{\$ } MARKDOWN}{\text{\$ } NET SALES} \times 100$$





❖ **PLANNED STOCK =**

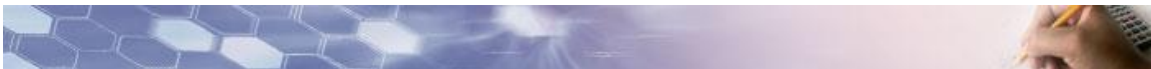
*PLANNED MONTHLY SALES × STOCK TO SALES RATIO*

❖ **STOCK TO SALES RATIO =**

*$$\frac{\text{BEGINNING OF MONTH \$ STOCK}}{\text{SALES FOR PERIOD}}$$*

❖ **AVERAGE STOCK =**

*$$\frac{\text{SUM OF EACH PERIODS BEGINNING OF PERIOD STOCK + THE LAST END OF PERIOD STOCK}}{\text{\# OF PERIODS}}$$*





## **STANDARD MEASUREMENTS**

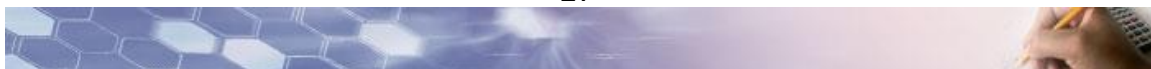
### **Employee Performance – Standard Measurements**

This section deals with measurement of performance of Head Office employees and store level employees, both individually and collectively. A store's performance can be attributed to the sum of the contribution of all employees working in the store.

Of all costs incurred at store level, wages are by far the most significant. This is so because wages represent a high percentage of sales and also because they are controllable to an extent. Once the basic floor coverage is met, the balance of hours or wages used are at the discretion of the Store Manager. S/he is usually charged with the responsibility of using wage dollars and hours in the most productive way possible. S/he creates a staffing schedule which uses each dollar and hour carefully.

Wage costs at Head Office level are significant also and productivity needs to be monitored and controlled as seriously as those at Store level. Usually, the productivity of Head Office employees is more difficult to measure, as they are not directly influencing sales to customers, but there are certainly measurements that can, and must, be made.

The smart retailer analyzes productivity regularly and carefully to ensure that employee productivity is optimized.





**1) Net Sales per FTE Employee – this refers to sales personnel only**

$$\frac{\text{Net Sales}}{\text{Total FTE Employees}}$$

The result of this calculation will give you the average sales dollars generated by each FTE employee. Of course, many employees may actually fall below or may exceed the average and those will come to light with more detailed analysis of productivity by employee.

**2) Wage Productivity (or Wage Cost)**

$$\frac{\text{Total Wage Costs}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$

The result of this calculation will give you the percentage of sales used for payroll costs.

Different retailers will have different standards with which to measure this cost against. For example, a wage cost percentage of 7% may be deemed exceptional to some retailers while it is deemed as too high, or right in line, for other retailers.

Wage Cost gets a lot of attention. It is seen as one of the Store Manager's largest areas of opportunity to contribute to the profitability of the store because of the two ways to improve the result. They are 1) Increase Sales, 2) Decrease Payroll Expense.





The Store Manager can have a significant impact on Wage Cost by:

- ❖ hiring the right people
- ❖ training the people well
- ❖ scheduling effectively and adjusting often based on sales trends
- ❖ monitoring and discussing performance often to ensure each associate is pulling their weight

### 3) Gross Margin per FTE Employee (Sales personnel only)

$$\frac{\text{Gross Margin Dollars}}{\text{Total FTE Employees}}$$

The result of this calculation will give you the gross profit dollars generated, on average, by each employee. Using this as a benchmark you can compare each individual employee's gross margin contribution to see how they measure up.

### 4) Suppliers per Buyer

$$\frac{\text{Total Suppliers}}{\text{Total FTE Buyers}}$$

The result of this calculation will give you the average number of suppliers being handled by your buying staff members. Then, when you look at the actual number of suppliers, and SKU's, being





handled by each buyer you will be able to make comparisons regarding the workload and productivity of each buyer.

## 5) Return Rate

$$\frac{\text{Total Refund Dollars}}{\text{Total Net Sales}} \times 100 \text{ to express as percentage}$$

The result of this calculation will give you the return rate, or the percentage of sales made that are subsequently returned for credit. In examining return rates there are several factors to consider.

These include:

- ❖ The quality of the merchandise being sold
- ❖ The performance of the merchandise (i.e.: Does the merchandise perform as promised?)
- ❖ The sales ability of the personnel involved. (i.e.: Is the sales associate qualifying the prospect properly? Is s/he making false promises in order to make the sale?)

Further analysis of the return rate of each individual sales associate will help to identify performance issues.







## 6) Sales per Transaction

$$\frac{\text{Total Net Sales}}{\text{Total Number of Transactions}}$$

The result of this calculation will give you the amount of the average sale made. This result will have different meaning depending on several factors.

These include:

- ❖ average selling price of the merchandise offered
- ❖ number of items purchased in each transaction
- ❖ customer traffic level
- ❖ regular customer or 'sale' customer

For example, if the average selling price of your merchandise is \$35.00 per item and you are having a 50% off sale, the average sale could conceivably drop dramatically. Of course, a 50% off sale should entice each customer to buy more thus increasing the average sale but you must also take into account that your 50% off sale may draw a large number of 'sale' customers who come in only to buy an item that is on sale.

It is the job of the merchandisers and sales associates to ensure that each customer is enticed to buy more, particularly during sale periods when that task should be easier.





## 7) Customer Conversion Rate

$$\frac{\text{Total Transactions}}{\text{Total Customers Entering the Store}} \times 100 \text{ to express as percentage}$$

The result of this calculation will give you the percentage, or rate, of customers who came into the store and made a purchase. This is the rate at which your merchandising, presentation and sales efforts are successful in converting a customer into a buying customer.

The acceptable number varies from retailer to retailer depending on the merchandise offered for sale and the norms for that type of retail business.

Many retailers install automatic traffic counters to improve accuracy when making this very important and revealing calculation.

The conversion rate for a retailer can differ from one day to another for many reasons but one that is easily identified and corrected is the scheduling and staffing. Whether it is a scheduling issue, a management issue or an employee issue these can usually be quickly determined, particularly by a skilled Store Manager.

As with any other measurement, the traffic count needs to be credible. If the accuracy of the traffic count is in dispute, the calculation becomes meaningless.





## Store or Selling Space Performance – Standard Measurements

### 1. Occupancy Cost per Square Foot

$$\frac{\text{Occupancy Cost}}{\text{Square Footage of Selling Space}}$$

The result of this calculation will give you the cost, in dollars, of each square foot of selling space. This is very useful when determining the sales volume and gross margin that would be required to cover occupancy costs alone. Of course, the sales and gross margin would need to be high enough to cover all other costs as well and, also, to return a profit to the stakeholders.

For a retail organization with several locations, this calculation can be helpful for comparing the various locations and for making decisions regarding new locations and/or renovations to existing locations.

### 2. Sales per Square Foot

$$\frac{\text{Net Sales}}{\text{Square Footage of Selling Space}}$$





The result of this calculation will give you the sales dollars generated by each square foot of selling space. This formula is used often and can be used for many different scenarios.

For instance, you can make this calculation for each area, or department, within a store and the result can help you determine the best use of your space. It allows you to compare the performance of a particular product when placed in one location versus another location.

### 3. Percent of Selling Space

$$\frac{\text{Square Footage of Selling Space}}{\text{Total Square Footage (entire space)}}$$

The result of this calculation gives you the percentage of space being used for selling relative to the entire space occupied. Generally speaking it is desirable to have a high percentage of selling space.

When calculated by department, or product line, or even by fixture an analysis of the percentage of selling space and the sales generated out of that selling space helps you determine how well that particular selling space is performing.





## Costs - Standard Measurements

### 1) Operating Costs as a Percent of Net Sales

$$\frac{\text{Operating Costs}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$

The result of this calculation will give you the percentage of operating costs relative to net sales. This calculation is performed at regular intervals to ensure that there are no unexplained increases in the cost of operations. If there are marked increases, or decreases for that matter, more investigation into the causes is warranted.

### 2) Administration Costs as a Percent of Net Sales

$$\frac{\text{Total Administration Costs}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$

The result of this calculation will give you the percentage of administration costs relative to net sales. Again, this calculation is performed at regular intervals to ensure that administration costs are in line with expectations.





Retailers should, and do, regularly assess administrative processes and procedures as the associated costs tend to grow easily.

### 3) Occupancy Costs as a Percent of Net Sales

$$\frac{\text{Occupancy Cost}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$

The result of this calculation will give you the percentage of occupancy costs relative to net sales. Occupancy costs are generally stable, or fixed, with the exception of any 'Percent of Rent' clauses included in lease contracts.

A 'Percent of Rent' clause usually means that the retailer pays a fixed amount of rent each month and, at the end of the year, the total of all rent paid is compared to a previously agreed upon percentage of net sales. If the percentage of net sales comes to a dollar amount higher than the amount paid throughout the year the retailer must pay the difference to the landlord. If the amount paid throughout the year is higher, no refund is given.



Occupancy costs must be in line with expectations. If they are not, the retailer needs to make decisions as to the viability of that particular location. Perhaps the rent is too steep or the potential to generate sales is too low. In any case, when occupancy costs are too high it signals a problem which must be dealt with.







## Inventory – Standard Measurements

Inventory management, done well or poorly, can have a huge impact on an organizations financial picture. For the retailer, inventory usually represents a very large portion of their assets. Continuous improvement in inventory management practices is very important.

### 1) Inventory Turnover Rate

$$\frac{\text{Net Sales}}{\text{Average Retail Value of Inventory}}$$

The result of this calculation will show you the number of times inventory is turned, or sold and replenished, in a given period of time. It is desirable for inventory to turn quickly so that the retailer can pay for the inventory purchased by using the money received for the sale of that inventory. Carrying inventory for long periods, forcing the retailer to pay for the merchandise before it is sold, is very expensive particularly in terms of interest charges.

### 2) Percent Inventory Carrying Costs

$$\frac{\text{Inventory Carrying Costs}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$





The result of this calculation allows you to track the percentage of net sales represented by the inventory carrying costs.

### 3) Gross Margin Return On Inventory Investment (GMROI)

$$GMROI = GM\% \times \frac{\text{Sales}}{\text{Average Value of Inventory}}$$

The result of this calculation gives you the margin dollars returned for each dollar invested in inventory.

Retailers generally use the **Retail value** of inventory in this calculation rather than the **Cost value** of inventory. The retail method is easier to use and is more often used because it may be difficult to value the inventory at cost, however, the retail method is not always accurate as far as actual investment costs go. GMROI is a very important measurement because it indicates the profitable and problem items/categories and if applied to all vendor items, it will show you the most profitable vendors, lines. (See presentation section of Retail Math Made Simple for GMROF and GMROL)

### 4) Shrinkage Percentage

$$\frac{(\text{Actual Inventory} - \text{Book Value of Inventory})}{\text{Net Sales}} \times 100 \text{ to express as percentage}$$





The result of this calculation gives you the percentage of your net sales being lost to shrinkage. Most organizations have established a shrinkage target and if the result of this calculation is higher than the target, serious investigation is warranted.

Shrinkage has internal and external causes.

Internal – employee theft and paperwork errors, which includes unrecorded defective and/or damaged merchandise write-offs

External - usually includes shoplifting/theft but can also include undetected paperwork errors made by suppliers.

## Other Financial Information – Standard Measurements

### 1) Return on Investment

$$\frac{\text{Net Profit after Tax}}{\text{Shareholders Equity}} \times 100 \text{ to express as percentage}$$

The result of this calculation gives you the percentage return on capital invested. This is a very common measurement and provides a standard for comparison of different investment opportunities.





## 2) Return on Sales

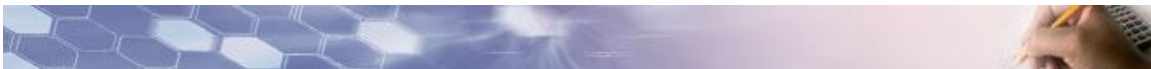
$$\frac{\text{Gross Margin}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$

The result of this calculation shows you what percentage of return you are getting from sales when taking into account only expenses attributable to the merchandise that you sell. A decrease in this number from one period to another could indicate problems with pricing, markdowns, inventory management in general.

## 3) Profitability

$$\frac{\text{Net Profit}}{\text{Net Sales}} (\times 100 \text{ to express as percentage})$$

The result of this calculation gives you the percentage of profit gained in a specific period through net sales for the same period. The higher the percentage, the more profitable the company is.





This formula differs from one organization to another as some use the Net Profit figure before interest and taxes and others use the Net Profit figure after interest and taxes. Consistency is the key.

The result of this calculation may be skewed if any unusual gains or losses are included in the figures. An unusual gain or loss would be any item that would not normally be included in profitability calculations for other periods and, if they weren't, valid comparisons would be impossible.

#### 4) Profit Growth

$$\frac{\text{Net Profit (This Period)}}{\text{Net Profit (Prior Period)}} (\times 100 \text{ to express as percentage})$$

The result of this calculation will show you how this periods profit compares to the profit of the previous period. The retailer can easily track profit growth or decline over any period desired.

#### 5) Sales Growth

$$\frac{\text{Net Sales (This Period)}}{\text{Net Sales (Prior Period)}} (\times 100 \text{ to express as percentage})$$





The result of this calculation gives you the percentage of sales growth from one period to another.



As with any other indicator, it is important to ensure comparisons of one period to another are valid. Take factors such as price increases into account when making comparisons.

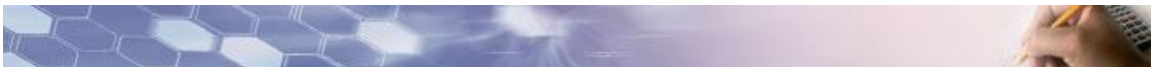
#### 6) Working Capital

***Current Assets – Current Liabilities***

The result of this calculation tells you how many dollars are available for working capital.

#### 7) Short-Term Liquidity

***Current Assets***  
***Current Liabilities***







The result of this calculation tells you how many times more assets you have than liabilities. This tells you whether the company has the ability to pay debts off immediately.

#### 8) Acid Test Ratio

$$\frac{(\text{Current Assets} - \text{Inventory})}{\text{Current Liabilities}}$$

The result of this calculation will indicate short term liquidity adjusted to account for the cost of inventory. Inventory is a Current Asset and, as such, is fairly liquid but, in the event that inventory cannot be sold quickly and a retailer wants to know how liquid they are exclusive of inventory, this formula is used.

#### 9) A/R Days Outstanding

$$\frac{\text{Average Accounts Receivable}}{\text{Total Credit Sales}} \times 365 \text{ days}$$

The result of this calculation will tell you how many days of credit sales are tied up in accounts receivable or, in other words, how many days it will take





to collect the receivables outstanding. Ineffective collection procedures would contribute to a high number of days outstanding.

#### 10) A/P Days Outstanding

$$\frac{\text{Average Accounts Payable}}{\text{Total On – Account Purchases}} \times 365 \text{ days}$$

The result of this calculation will tell you the number of days it takes to pay for merchandise purchased on-account. Any increase in the number of

A/P Days Outstanding could mean that Accounts Payable procedures are ineffective. It should be noted that paying unusually late can result in excessive interest charges and a damaged reputation with suppliers.





## OPEN TO BUY (OTB)

As you will see from the following explanations and calculation, Open to Buy is a formula used by Merchants and Buyers for the purpose of determining how much inventory they need to purchase in order to have enough merchandise to meet the sales plans.

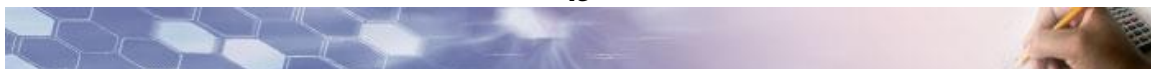
Generally speaking most companies develop an annual plan and then break it down by month in order to make it manageable and relevant.

Many changes can occur throughout a fiscal year and all areas of the company have to be able to flex and manage according to the realities.

Sometimes business becomes so good that buyers have to get more merchandise to sell and they can't get it fast enough, and other times the market cools and buyers have to stall or cancel future orders to avoid the huge financial and logistical burden that comes with having too much inventory.

As in any other area of the business the buyers must perform a balancing act in order to have just enough but not too much. Their job is made more difficult by the fact that many retail buyers purchase goods well in advance of the date of delivery as a long lead time is needed for the manufacturer to produce the goods to the exact specifications of a particular retailer.

Suffice it to say that although the OTB calculation is a fairly simple one but managing the process certainly is not.





### **Advantages of OTB:**

- Estimate inventory capital required in advance
- Ensure correct inventory levels for planned sales
- Control merchandise commitments
- Provide more opportunity for profit

### **Example: Open to Buy - February**

**Planned EOM Inventory** (this is the inventory we plan to have by the end of the month of February): **\$90,000**

**Planned (budgeted) sales for the month of February:** **\$30,000**

**Planned markdowns for the month of February:** **\$2,000**

**Inventory on hand at the beginning of the month (BOM) of February:** **\$60,000**

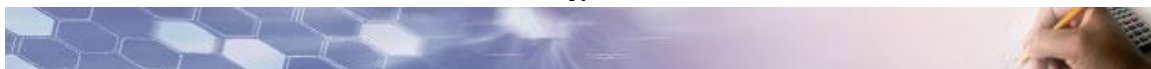
**Inventory already on order for February:** **\$46,000**





Using the figures above, here is the calculation for Open to Buy for the month of February:

Planned EOM Inventory Feb	\$ 90,000	
+ Sales for February	\$ 30,000	
+ Markdowns	\$ 2,000	
<b>= Inventory Required</b>	<b>\$122,000</b>	
- BOM Feb Inventory	\$ 60,000	
<b>= Allowable Receipts</b>	<b>\$ 62,000</b>	
- On Order for Feb	\$ 46,000	(\$46K on order and expected)
<b>= Open to Buy Feb</b>	<b>\$ 16,000</b>	





## **SELL THROUGH**

(Commonly written as Sell -Thru)

Sell-Thru is a key performance indicator (KPI) for retailers. Sell-Thru allows us to understand the velocity with which inventory is being sold as it relates to our sales. Generally used by the Buying or Merchandise teams, sell-thru is a leading indicator which is very useful for tracking inventory performance and for predicting outcomes.

Before determining the sell-thru formula that will be most beneficial for your use, you need to determine whether to use:

- 1) all available information – meaning all weeks of sales and inventory for the period
- 2) most recent information – meaning only the weeks of sales and inventory you determine to be relevant ( ie: 4 weeks)

You will get different results depending on the choice you make. If the product being measured is a regular item which is replenished according to established minimum/maximum guidelines, you might want to use all information available. However, if the particular product being measured is strongly promoted and you want to see how the sales are affected by the promotions in a given time frame, then using information covering a shorter time span will be more beneficial.

Either way you will get accurate information, but using the one most applicable to the circumstances will give you better information on which to base decisions.

See the example below:

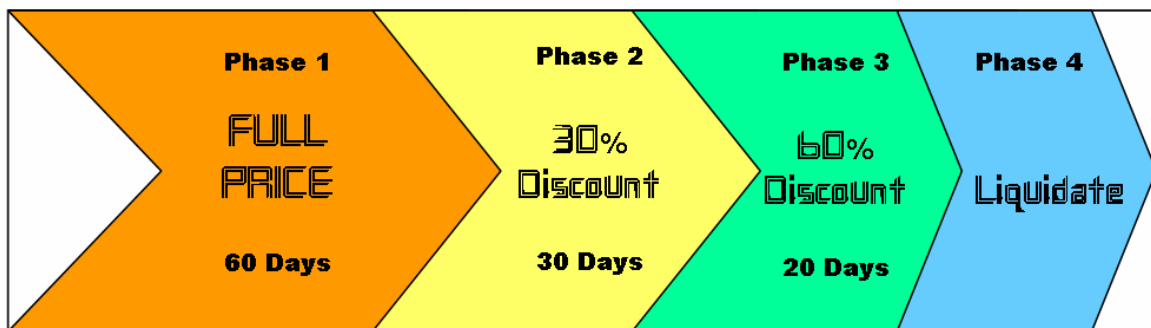






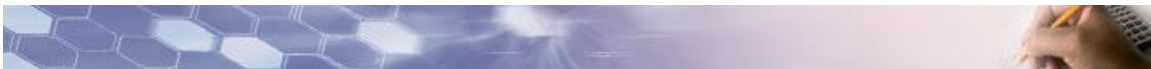
## A Typical Mark Down / Sell Thru Cycle

### For a Promotional Product



### Sell Thru Scenario for the Cycle Above

<i>To Obtain Different Scenarios, Try Changing MD Amount</i>									
Mark-Down Timeline	Full Price	Sell Price	Margin %	Cost	Units Remaining	Units Sold	Sell-Thru %	Total Sales \$	Total Margin \$
Days 1-60	59.99	59.99	50.0	29.99	600	330	55	19,796.70	9,900.00
Days 61-90	59.99	41.99	28.5	29.99	270	108	40	4,534.92	1,296.00
Days 91-110	59.99	23.99	-20.0	29.99	162	48	30	1,151.52	-288.00
Days 110+	59.99	5.99	-80.0	29.99	114	114	100	682.86	-2,736.0
			<b>31.23</b>	<b>17,994</b>	<b>0</b>	<b>600</b>	<b>100</b>	<b>26,166.00</b>	<b>8,172.00</b>





## Typical Profit / Loss Statement

Explanation of P/L Statement on the next 3 pages...

	This Year		Last Year		% Variance B/(W)	
	\$	% of Sales	\$	% of Sales	\$	%
<b>Sales</b>	1,000,000	100.0	950,000	100.0	50,000	0
<b>Cost of Goods Sold</b>	600,000	60.0	588,050	61.9	17,000	1.9
<b>Gross Margin</b>	400,000	40.0	361,950	38.1	33,000	1.9
<b>Operating Expenses</b>						
Store Wages						
Salaries	70,000	7.0	71,250	7.5	1,250	.5
Payroll Taxes and Benefits	10,000	1.0	10,450	1.1	450	.1
Total Store Wages	80,000	8.0	81,700	8.6	1,700	.6
Occupancy						
Rent	150,000	15.0	150,000	15.8	0	.8
Utilities	4,000	.4	4,175	.4	175	0.0
Repairs & Maintenance	2,000	.2	3,600	.4	1,600	.2
Depreciation						
Total Occupancy Expenses	156,000	15.6	157,775	16.6	1,775	1.0
Overhead & Other Expenses						
Bank Charges	15,000	1.5	15,000	1.6	0	.1
POS	8,000	.8	8,000	.8	0	0.0
Maintenance	5,000	.5	4,800	.5	(200)	0.0
Supplies	7,000	.7	6,650	.7	(350)	0.0
Telephone	5,000	.5	4,750	.5	(250)	0.0
Travel	1,000	.1	1,900	.2	900	.1
Visual & Marketing	25,000	2.5	22,000	2.3	(3,000)	(.2)
Other	17,000	1.7	15,200	1.6	(1,800)	(.1)
Total Other Expenses	83,000	8.3	78,300	8.2	(4,700)	(.1)
Total Store Expenses	319,000	31.9	317,775	33.4	(1,225)	1.5
<b>Store Profit</b>	81,000	8.1	44,175	4.7	36,825	3.4





## Let's walk through the example of a Typical Profit/Loss Statement.

Here are some things you should know before we get started:

- 👉 This Year is abbreviated as TY
- 👉 Last Year is abbreviated as LY
- 👉 % Variance B/(W) – B (or a positive variance) means **Better** than Last Year
- 👉 % Variance B/(W) – (W) (or a negative variance) means **Worse** than Last Year
- 👉 In the 'This Year' and 'Last Year' columns, every number is calculated as a percentage of Sales
- 👉 In the % Variance column, the dollar variance is shown for information purposes only – it is not part of the calculation. The percentage variance is the relevant one. B means better than LY and (W) means worse than LY. If the number has no brackets around it, it is a positive (or better) variance. If the number has brackets around it, it is a negative (or worse) variance.

The first thing we see on the P&L is **Sales**. You'll notice that our sales this year (TY) are \$50,000 higher than they were last year (LY). You'll also notice that there is 0% Variance. This is because we use Sales to compare everything to. Sales are always 100%. Sales are 100% TY and they were 100% LY.





**Cost of Goods Sold (COGS)** were higher TY than LY, by \$17,000. But, because COGS were only 60% of Sales TY and 61.9% of Sales LY, that means that Cost of Goods Sold went down as a percentage of sales so there is a positive or better variance of 1.9%. It's better because we spent less, percentage wise, to buy the goods that we sold, even though the dollars were higher.

**Gross Margin** was 38.1% of Sales LY and 40% of Sales TY. That is positive, or better than LY. The Gross Margin percentage went up by 1.9%.

**Operating Expenses** – Total Store Wages were lower TY than LY. We actually spent fewer dollars TY even though we got more Sales than we did LY. LY Total Store Wages were 8.6% of Sales and TY they were only 8.0% of Sales. Therefore, the variance is positive, or better, by .6%.

**Occupancy** – Total Occupancy Expenses were lower this TY than LY. We spent fewer dollars. You'll notice that dollars paid for rent remained the same, but we spent less on Utilities and less on Repairs & Maintenance TY than LY. Overall, we managed to reduce Total Occupancy Expenses by 1% of Sales. As you see, the % Variance is 1.0 positive, or better.

**Overhead & Other Expenses** – Total Other Expenses were higher TY than LY. We spent more dollars in most of the categories. Overall, we spent .1% more as a percentage of Sales. The variance is in brackets, which is negative and which means we performed worse than LY. Generally we expect to spend more in expense dollars in some categories when Sales are higher but you'll notice that even though we spent more dollars in Maintenance, Supplies and Telephone, the percentage of Sales stayed the same creating no variance, either better or worse. But, in Visual & Marketing, and in Other, our percentage of Sales increased creating a negative, or worse, variance from LY.





**Total Store Expenses**, which is the total of Store Wages, Occupancy Expenses and Total Other Expenses were higher TY than LY. However, as a percentage of Sales we performed well. Total Store Expenses were only 31.9% of Sales, as opposed to LY at 33.4% of Sales, or a positive variance of 1.5%.

**Store Profit** dollars were \$36,825 higher TY than LY. LY Store Profit was only 4.7% of Sales and TY it was 8.1% of Sales, creating a positive variance – better than LY - of 3.4%.





## Test Your Knowledge – Retail Math Quiz

1.) What are the 6 Pillars of Retail?

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2.) A product's retail price is \$79.95 and it costs \$42.00. What is the Gross Margin of this product?

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3.) What is the Mark-up for the same product?

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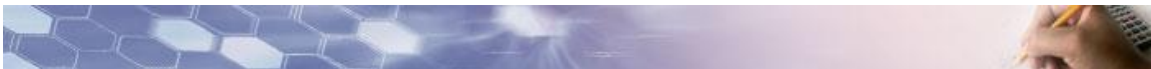
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- 4.) A store's annual sales are \$3,560,250. Monthly inventory is as follows:

Month	BOM	EOM
January	1,455,764	1,210,357
February	1,210,357	1,050,894
March	1,050,894	975,620
April	975,620	1,125,735
May	1,125,735	1,024,563
June	1,024,563	967,446
July	967,446	896,278
August	896,278	1,383,369
September	1,383,369	1,432,911
October	1,432,911	1,791,876
November	1,791,876	2,687,987
December	2,687,987	1,375,218

Based on these numbers, calculate the inventory turns for the year.  
*Hint: Calculate Average Inventory first.*

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- 5.) Utilizing the already calculated Gross Margin, Sales and Average Inventory, find out what the GMROII would be for this store, for the same year.

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- 6.) We want to utilize GMROF to compare two display fixtures of different design:

**Fixture 1:** Oval shape with merchandised area of 7.65 square feet. Sales generated from this fixture in one month are \$3,465 and Gross Margin on those sales is 43.5%.

**Fixture 2:** Rectangular shape with merchandised area of 7.20 square feet. Sales generated from this fixture in one month are \$2,987 and Gross Margin on those sales is 45.6%.

**Which fixture is more profitable?**

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7.) We want to compare the contribution of staff between two stores. Here is the data we have:

<i>Store</i>	<i>Sales This Month</i>	<i>Gross Margin</i>	<i>Total Payroll</i>
1	\$270,500	44.7%	\$44,895
2	\$343,750	42.5%	\$55,280

### Which store's staff is contributing more?

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



8.) Here is some store data collected through POS and Traffic Counters:

# of people who entered the store	1,362
# of sales tickets generated	398
Total number of units sold	724
Total payroll for the same period	\$3,842
Total sales generated	\$34,548

**Calculate the following:**

1. Conversion Rate
2. Average Sales per Transaction
3. Units per Transaction
4. Wage Cost

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9.) Here is the overall company data for the 3<sup>rd</sup> quarter sales:

Month	Sales	Last Year	% Ach.	Target	% Ach.
July	\$2,074	\$1,926		\$2,022	
August	\$1,866	\$1,792		\$1,882	
September	\$2,672	\$2,503		\$2,628	
Total Q3	\$6,612	\$6,221		\$6,532	

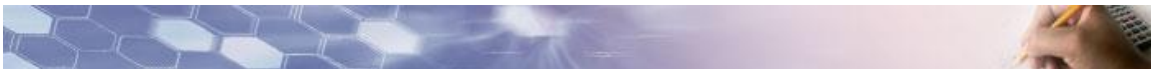
Calculate this year's performance compared to Last Year and compared to Target for each month and for the 3<sup>rd</sup> Quarter.

[illegible]



## **Answers for Retail Math Quiz:**

- 1.) People, Place, Product, Price, Promotion, Pixel
- 2.) 47.46%
- 3.) 90.35%
- 4.) 2.66 turns (Avg. inventory is \$1,336,770.6)
- 5.) 126.2%
- 6.) Fixture 1 is more profitable. (GMROF for fixture 1 is 197; GMROF for fixture 2 is 189)
- 7.) Store #1 is contributing more. (GMROL for Store 1 is 269.33; GMROL for Store 2 is 264.28)
- 8.) Conversion Rate is 29.2%, Average Sales per Transaction is \$86.80, Units per Transaction are 1.82, Wage Cost is 11.12%
- 9.) July – 107.7% of LY, 102.6% of Target  
August – 104.1% of LY, 99.1% of Target  
September – 106.8% of LY, 101.7% of Target  
Total Q3 – 106.2% of LY, 101.2% of Target







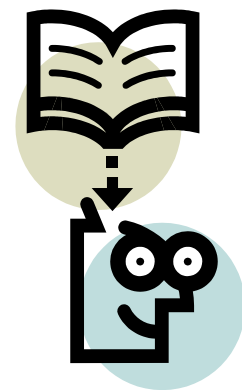
**You have reached the end of the First Section of 'Retail Math – Made Simple' by DMSRetail.**

You will probably want to read it over a few times and refer back to it often. If you have not been exposed to retail math before, you will likely feel empowered to delve into your business a little deeper than you did previously. Also, you will want to share some of your new insight and understanding with your employees. It is our hope that you will, so that more retail personnel can become more involved with the business they are in. Too many retail associates don't feel like an integral part of the retail store team because they are given too little information. As Managers it is our duty to change that.

DMSRetail is in the business of helping retail people and inspiring them to serve their customers better in the process.

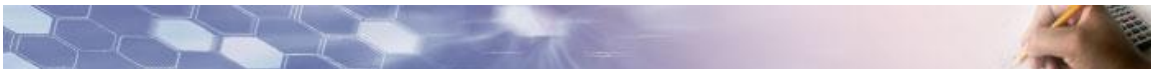
We look forward to hearing any comments or questions you may have. Please send an e-mail to [info@dmsretail.com](mailto:info@dmsretail.com).

Thanks for your interest in DMSRetail Management Success Guides.





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## Managing by Numbers Retail Math Made Simple

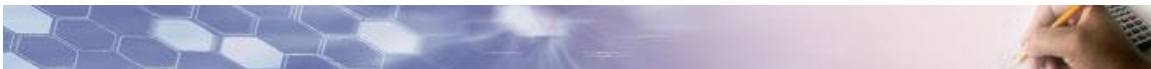


### Presentation



#### SLIDE 1:

Welcome.





## The Retail Math Made Simple

- Metrics
- KPI's
- Balanced Scorecards



### SLIDE 2:

We have metrics, KPI's and Balanced Scorecards on the Agenda.

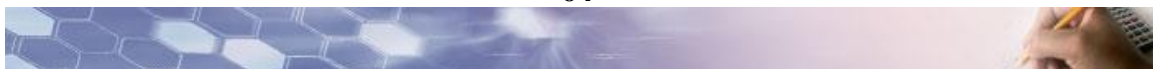
We are going to look at the key measurements, and the metrics, in retail.

Then, we're going to look at some of the key performance indicators and after that we are going to introduce a technique called "Balanced Scorecards."

I am not sure if you have heard of that before, but "Balanced Scorecards" is a management, measurement technique.

We take the KPI's and incorporate them into this methodology and it is a very powerful measurement and management tool.

That is going to be the last major chapter in our presentation, today.





## Agenda

- Profitability Measurements
- Key Performance Indicators
- Commonly Used Formulas
- Open to Buy
- Sell Thru Scenarios
- Balanced Scorecards
- Operating Statement
- Q&A



### SLIDE 3:

Okay, so let us start with metrics, and just a little bit more detail about the agenda.

We'll talk about measurements, key performance indicators, and commonly used formulas.

We are going to look at how we calculate the key performance indicators and open to buy.

I am not sure if you are doing the buying yourself or how that works, but we are going to touch the open to buy, very briefly.

This presentation and Retail Math Made Simple is more directed towards the operations personnel, so we are talking about store managers, district





managers, regional managers, and the people who actually operate the store(s), versus the product people.

In larger organizations, there are two silos. One is the operations group, the other one is the product group, usually called merchandising.

In smaller operations, parts of those functions tend to combine, and the person in charge of very small retail operations basically handles both sides of the business.

Anyway, we are going to look at open to buy, in a little bit, and then, sell through scenarios, balanced score cards, as I mentioned, and we will touch on operating statements, during the discussion, because some of the key performance indicators, flow from the operating statement – sometimes called the P&L statement.







## Fundamental Business Equation



$$\text{Profit} = \text{Sales} - \text{Expenses}$$



### SLIDE 4:

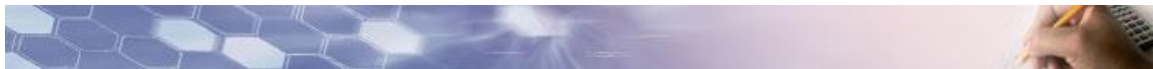
Alright, now first and foremost, we start with the fundamental business equation.

As we are a commercial entity, we have to make sure we generate a profit, at the end of the day, otherwise we are not going to stay in business for long.

To be able to generate the profit that we are looking at, sales have to be higher than the expenses.

You can go about this equation two different ways. One is, increasing the sales to make more profit.

The other one is, decreasing the expenses.





I like increasing the sales because I feel like every time we reduce the expenses, of course we are not talking about ridiculous expenses, we are talking about reasonable expenses, every time we reduce the expenses, we kind of shrink the business and we don't want that because we want the business to grow.

That is how I feel, and obviously we are not going to be stupid in spending money without a good reason, but as long as we keep a very good eye on expenses, we should be focused on increasing the sales and increasing the profitability.

From time to time, I am going to give you some ideas about increasing sales—just to change the conversation because retail math can get pretty monotonous and we are talking about math, after all.

It is not a lot of fun, but it is very fundamental knowledge, fundamental information that every retail manager must have.





## Increase Sales

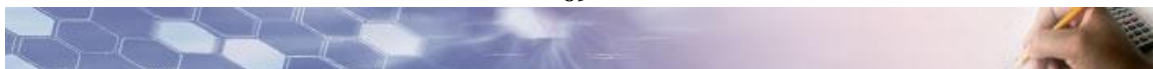
- Get New Customers
- Increase the Value of Each Transaction
- Sell to Existing Customers More Frequently
- Introduce New Products / Services



### SLIDE 5:

We said we are going to look at increasing the business. Now, one of the ways to do that is to increase the sales. You know, we just talked about—we would like to increase the sales, how are we going to do that?

There are only four ways of increasing the sales. Whatever you do will boil down to one of these four ways.





Number one is, get new customers. Newer customers, with more new customers, obviously, you are going to increase your sales.

Number two: Increase the value of each transaction. Sometimes we call it average sales dollar per transaction or, average dollars per customer. If you are doing \$25/transaction

Now, when you move that to \$30 average, obviously your overall numbers are going to increase.

Number three, sell to existing customers more frequently.

I do not know if that is very applicable in your situation, but certainly if you have that opportunity to bring the existing customers back, more often, that is going to increase your sales.

And, finally, introduce new products or services, so that there is a new revenue stream.





## Why Measure?

- What gets measured, gets done
- If you can't measure, you can't manage



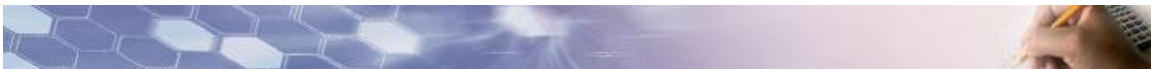
### SLIDE 6:

Now, talking about measurement, we have to measure what the business is doing, so that we can manage it.

That is one of the main reasons - because what gets measured, gets done.

The other one is even more important, if you cannot measure, you cannot manage because you would not even know if it is different, good, bad, better, worse, or whatever the case might be.

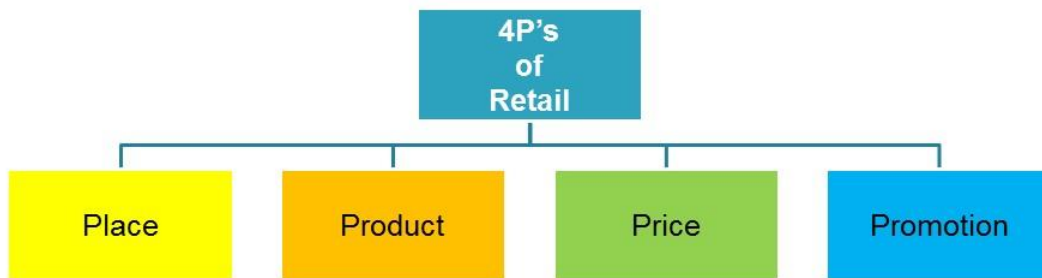
So, those are the two reasons why we measure things...in general, not just in retail business, but in everything else, too.







## Pillars of Retail (Historic)



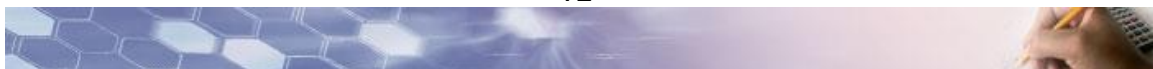
### SLIDE 7:

Before we get into the metrics, key metrics, I want to talk about the “Pillars of Retail.”

It started with four Pillars of Retail: place, product, price, promotion. Sometimes these are called the “four P’s of marketing,” too.

This is how retail got started.

Actually, retail started with bartering, as you know. Some people made certain things, other people made other things.







For example, you made shoes, I made sweaters. So, I came to you and I said, "Okay, I will give you two sweaters for one pair of shoes." You said, "Fine." We bartered those two, and then, as time went on, we wanted to make sure we could find the shoe person, so we said, "Why not stay here, so next time we come in, we can find you?"

That is how the store concept started. So, people started creating the first retail stores. Then things progressed and with the transportation, communication, and everything else developing, chain stores started and the rest is history as they say.

It used to be that you were limited by your surroundings; limited by your little area because transportation capability was not there. And then, chain stores started with the development of transportation and communications.

And, at that point, we discovered that there was something else in effect, besides the four P's...because when you look at a chain operation, especially a larger operation where there are hundreds and thousands of stores, you can easily find a couple of stores with similar characteristics.

Remember, we are talking about the same product, the same price, and same promotion. Promotion being everything you do for your marketing purposes. This is just a big, large marketing box that contains everything you do in terms of promotions, advertising, marketing, telecommunications with customers, everything.

Anyway, if you look at a chain operation, product is the same, price is the same, promotion is the same, and there are two very similar places. You can find them in chain organizations. Similar trade areas, same demographics of the customers, same psychographics, lifestyle of customers.

Yet, those two locations can give you two totally different results. You are expecting similar numbers coming out of these very similar locations. And, at that time, we found out there was another pillar at work, and that is people.





## Pillars of Retail (Semi-Historic)



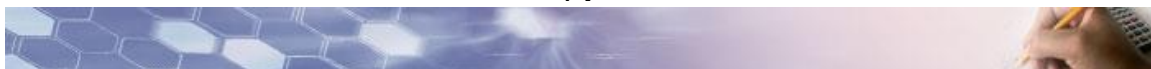
### SLIDE 8:

People make a huge difference in retail business. And, we discovered that, and we have to put that in along with the others. People are extremely important, as I was saying they make a huge difference.

So, that was discovered somewhere around the 1970's, 1980's, that "People are very important, let's pay attention to people."

Because, up to that point, most of the retailers were only paying attention to the four P's. And because it was a seller's market, it didn't seem that people mattered.

You could sell anything easily. Customers were grabbing the merchandise from your hands before it got to the shelf. There was little, if any, competition.





## Pillars of Retail (Present)

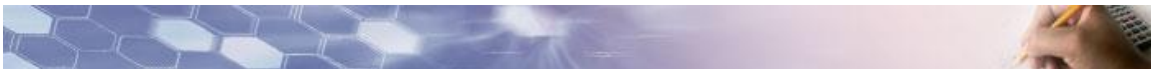


### SLIDE 9:

Anyway, by the end of last century, there was another pillar we discovered that was impacting the performance of retail organizations, retail operations, dramatically, and that is technology.

At DMSRetail, we came up with the 'pixel', to represent technology while staying with the P convention.

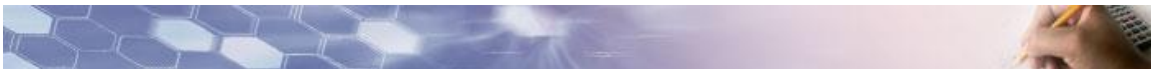
And, as you know, pixels are the little dots that make up the picture on your computer screen. And, we are still looking for a better word to describe technology, but it has to start with P, and it is not easy to find that perfect word.





Okay, so we ended up with six pillars of retail, and the whole purpose of having this discussion—and what I want you to do, is to operate most effectively in each one of these pillars, and then the synergy of all six pillars is going to give you a tremendously successful retail operation.

To be able to operate effectively in every one of these pillars, we have to put some measurements in place. How are we going to measure each one of these pillars?





## Key Metrics

# Place

### Key Performance Indicators:

- ☐ Sales / Sq. Ft.
- ☐ Traffic / Hour
- ☐ GMROF



#### SLIDE 10:

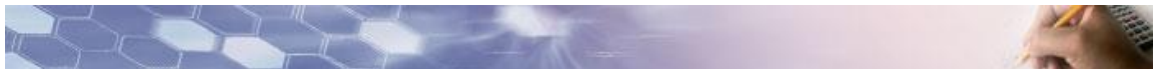
Start with place, the location.

How do we measure the effectiveness of location?

We measure the sales per square foot.

This is very common, especially for retail real estate people and shopping mall management.

Shopping malls always compare themselves with each other on the basis of sales per square foot that they generate. So, if one shopping mall generates, say, \$1,500 per







square foot and another one generates \$1,000 per square foot, then, the first one is seemingly a much better mall, and they can ask for higher rents.

That is how shopping malls are generally compared.

If you have a self-standing location or street location, then, you still want to know what kind of traffic is passing by, and we have certain types of traffic counters to do that.

Traffic counters count the people passing by, as well as people coming in to the store.

They are very useful devices, and it would be a good idea for you, if you do not have traffic counters, to install them asap..

As I said, that will allow you to measure the number of people passing by and how many people are coming in.

That will give you an idea of how your 'place' is doing—are you getting enough sales out of the location you are in? If not, why not?

Sales per square foot can be compared between two different stores, two different regions, two different districts, etc.

It gives you some understanding of how productive your locations are.







## Key Metrics

### Product

#### Key Performance Indicators:

- Inventory turns
- Weeks of stock
- GMROII
- Sell Thru



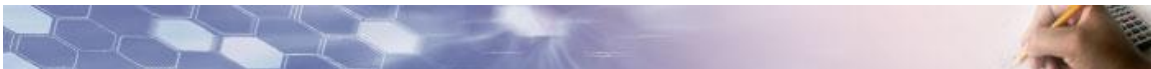
#### SLIDE 11:

When it comes to product, we are immediately talking about inventory turns.

Inventory turns are very important because every time you turn the inventory, obviously, you are making money. And, if you are not turning inventory, the opposite is true.

Therefore, the idea is to turn the inventory as many times as possible.

Second issue we are going to look at, or second measurement we are going to look at, is weeks of stock.





It is a very fast way of determining if you have too much or too little stock on hand. And, this is very important for store managers, regional manager, district managers, and merchandising people.

You may wonder about a certain item - if you have too much or too little stock - so you can just go in and take inventory and look at that product's average sales—we are going to talk about the formula... a simple formula to calculate the weeks of stock, momentarily so, I do not want to talk too much about it here.

Another, and arguably the most powerful formula in retail management, is GMROI, which stands for gross margin return on inventory investment.

It basically means, how much investment are you making into your inventory and how much return are you getting out of it. This formula will give you that number.

And, finally, we are going to look at sell thru. And, the definition of sell thru is the velocity at which merchandise moves.

For example, you bought 100 units of certain merchandise this week, and you sold them all by the end of this week, for this week the sell thru for that item was 100%.

It is a simple concept, but it shows how fast certain items are moving. And, it is important information for the marketing people, product people, and operations.





## Key Metrics

# Price

### Key Performance Indicators:

- ☐ Gross Margin
- ☐ Markup



### SLIDE 12:

Price is your profitability indication. And, how do we measure profitability?

We measure it by gross margin.

Our main profitability measurement is gross margin, obviously.

How much we paid for the item and how much we sold it for, the difference is gross margin.

Another way of measuring the differential between cost and selling price - and you must have heard this many, many times - is markup.

Suppliers, in particular, like to talk in terms of markup.





They are both profitability measurements, but the important thing is to stay consistent.

I will talk about why I like gross margin more than markup a little bit later, coming up.





## Key Metrics

### Promotion

#### Key Performance Indicators:

- ☐ ROI
- ☐ Sales Lift



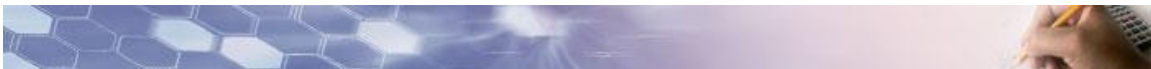
#### SLIDE 13:

Promotion.

Now, up to this point, all of the measurements we are making are black and white. No problem with accurately determining the metrics.

We have the computer systems. We have the POS. We have actual formulas we can use to measure.

But, when it comes to promotions, marketing stuff, now it is not so black and white. It gets fuzzy. It blurs.





The picture blurs a little bit because—say, for example, we took a full page advertisement in a daily newspaper, and we made some sales. But, it is not just because of that advertising, it depends on the weather, it depends on how many people decided

to show up, how many and how good my sales people are, how good my visual merchandising is, etc., etc.

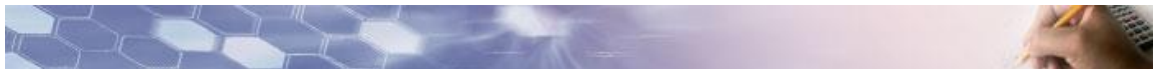
Another example: assume that we created a truly powerful advertising, but there is a snow storm and nobody wants to come out to shop. You know, hopefully, eventually, we will recover from that because people are going to come out at some point. But, again, it is not really black and white.

Nevertheless, the CEO's and the top management want some kind of an indication of what kind of return we are getting on our advertising and marketing because a lot of money is being spent.

So, you have got to provide some kind of a number, some kind of a feeling, an indication, in terms of return on investment. One of the things you can do is to look at the sales lift.

For example, let's assume you ran some kind of promotion or advertisement, and then, what happened immediately after. Compare that to the previous week, previous month, same week, and then, previous year, same week.

See what kind of sales lift you've got, and then, turn that into some kind of return on investment calculation. It is a tough job, but as I said, more and more chief marketing officers are held responsible for delivering some kind of return on investment, at least.







## Key Metrics

### People (Staff)

#### Key Performance Indicators:

- ☐ Sales / Hour
- ☐ Average \$ / Transaction
- ☐ Units / Transaction
- ☐ Wage Cost
- ☐ GMROL

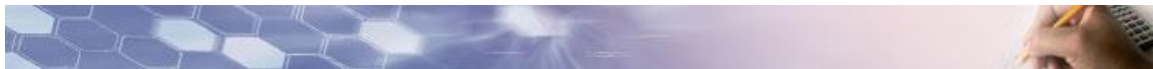


#### SLIDE 14:

When it comes to people, we talk about retail being one of the most human intensive businesses...we're all people, our staff are people, our management are people, customers are people... very people intensive business. So, we divided the people side of things into two groups. One, is our staff, the other is the customer side.

We are going to take some measurements, so what kind of metrics do we need to look at?

Well, we have to look at sales generation. Sales per hour, sales per day, sales per month, quarter, Etc. We always look at sales.





That is the number one thing everybody looks at, right? In the morning, you go to your office and the first thing you check is, "How much did we sell, yesterday?"

The standard time frame of measurement for sales is daily. Right at the end of the day, or you know, next morning, everyone gets the sales report.

We usually look at sales per day, but there are times we want to look at sales per hour, especially if we are running a promotion. We want to know how the stores are doing, so we would ask people to report on an hourly basis, so we have a feel how the promotion is going.

And, obviously, merchandising people want to know how fast a product is flying, so they can look after replenishment, or whatever the case might be.

Perhaps they'll decide to re-distribute certain merchandise between the stores. So, sometimes we would require the information on an hourly basis.

And, of course, if you are sophisticated enough to have a real time computer system or information system, you will get the information as it happens, anyway. When you have a real time system you have the numbers in any given minute.

And, the other thing we look at is average dollar per transaction. Now, average dollar per transaction, I think we briefly touched on that. It is the dollar value of the transaction, or the dollar value of the customer or customer interaction.

And, we look at units per transaction. I am going to come back to these, in terms of key performance indicators.

We are going to look at the metrics now, and then as key performance indicators later.

We will have more discussion as to why these are so important.

We are also going to look at wage cost.

Wage cost is important because, usually, it is the second largest investment you are making in your retail operation, the first one being your inventory.



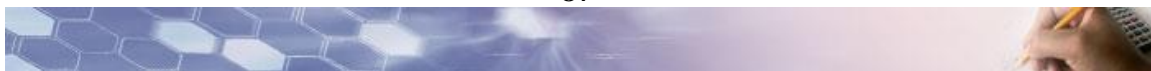


Therefore, you have to be watching that on a constant and continuous basis.

GMROL, gross margin return on labor should be, really, payroll, but this is not brand new terminology, so this is kind of the traditionally accepted form of expressing it, I guess.

So, gross margin return on payroll, or labor, or staff cost. Whatever you want to call it.

Okay. Again, all of these measurements are black and white. No problem. We have the systems in place to measure all of these.





## Key Metrics

People  
(Customers)

### Key Performance Indicators:

- ☐ # of Complaints / Sales Volume
- ☐ Average Wait Time at Cash
- ☐ # of Repeat Customers / Sales Volume
- ☐ # of Praise Letters / Sales Volume



### SLIDE 15:

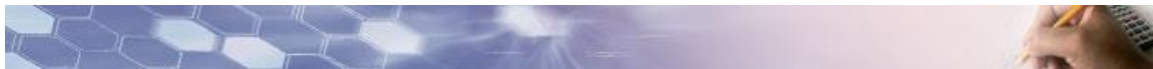
But when we move to the customer side of things, it gets a little bit fuzzy, again. Now, why does it get fuzzy? Because, what we want to measure is customer satisfaction.

What is the definition of customer satisfaction?

I will give you the standard definition that we go by.

The customer is satisfied when you meet their expectations.

The customer is dissatisfied when you fail to meet their expectations.





And, the customer is delighted when you exceed their expectations.

So we have three situations here. Satisfaction, dissatisfaction, and then delighted.

Alright. Now the difficulty is, people have different expectations.

For example, someone who is used to five star hotels. If you take them to a two star hotel, no matter what you do, you are not going to be able to satisfy this person, because he or she is used to the amenities, facilities, features, and benefits of a five star hotel. At a two star hotel, it does not matter how good the people are, whatever they do, it is just, by nature, lacking the features of the product.

You are not going to be able to deliver the benefits that this person is accustomed to.

With the same token, if someone is used to two star hotels and you take them to a five star hotel, they are going to be delighted. They are not going to believe what is possible in a hotel.

So, unfortunately we have difficulty measuring customer satisfaction because of the different expectations from different people.

This is where knowing your customer enters the equation, if you know your customer well, you are in a much better position to figure out their expectations.

Nevertheless, one thing we can count on is the number of repeat customers, because a repeat customer means they are satisfied.

If you are not satisfied with the place you are buying stuff from, you are not going to go back.

You are just going to look for an alternative. You are going to look for some other place to obtain that merchandise, whatever you are looking for.

So, it's pretty much taken for granted that a repeat customer is a satisfied customer.

Another thing you can look at is the number of complaints. Unfortunately, though, most people do not complain. Most people just go away.







Another thing... if you are looking for some key metrics and you are a supermarket general manager or district manager, etc. you would be concerned about average wait time at cash.

In fact, supermarkets are so concerned about this, they will have a front line manager watching this situation at all times. And, that manager is responsible for all the cashiers, and her main responsibility is basically to make sure that the lines do not build to more than three. That is their standard. No more than three customers per register. And, you will see them calling more cashiers if the lines start getting more than three.

Praise letters and complaints. As mentioned earlier, you do not get enough complaints. You get even fewer praise letters.

Nobody is taking the time, nowadays, to write anything, especially praise letters, unless you have done something exceptional, unheard of, out of this world, kind of thing. But, people do not usually write praise letters.

But, if you happen to have a customer base who likes doing that, that could be a good metric for you to determine which store is more successful, or even which person is more successful, for that matter.

Overall, though, whenever you are in doubt, just talk to the customer. Just say, "Can I take a minute, or second of your time?" And, you can say, "Are you happy?" It is very simple.

A lot of people don't do it. But it is so simple because, after all, everything we are doing in a retail business - even with all this complex and sophisticated analysis - everything we do, all the training and the sales skills, and choosing the right merchandise, and distributing them to the right places at the right time...everything is for and about the customer.

There is a ton of very sophisticated stuff that we deal with, on a daily basis, in retail business, all of it for customer satisfaction. So, really everything we do, at the end, boils down to just one thing—customer satisfaction because we want to get that customer back, or sell more to that customer.

So, what is wrong with just taking a second and asking the customer, right there and then, while the iron is hot, "Mr. Customer," or "Mrs. Customer, are you happy?" And, they are going to say, "Yes" or "No." And, if they say "No," you are going to say, "Why?" They are going to give you a couple of reasons, and then, that is your opportunity to fix the problems.







## Key Metrics

Pixel

### Key Performance Indicators:

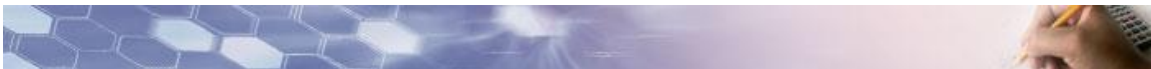
- ☐ ROI
- ☐ # of Errors / Sales Volume
- ☐ Speed of Transaction : # of Transactions / Hour



### SLIDE 16:

Moving on. Technology. And, just like marketing, just like promotion stuff, it's very difficult to determine exact return on investment. For example a new POS system, how is it helping our business? It is really difficult to figure it out accurately.

If the new POS system is bringing you new functionality that you did not have before, maybe you can sit down and say, "Okay. How much is this functionality worth to me?" You can develop some kind of a business monetization scenario, to figure out what the return on investment is on that purchase, or on that investment.





Or, if you are making a lot of accounting mistakes, and there is a nice, new accounting software that will eliminate 90% of your mistakes, you can monetize that, too. You are going to say, "Okay. How much is each mistake costing me, and then, how many errors am I making a month?"

For example, you are making 100 errors a month. And, you bought this software and now you are only making 20 errors a month, so you save 80 errors. How much is that worth, to me? So, that becomes the return on investment.

And, same with the POS. If your speed of transaction increases, and your customer satisfaction increases, again, what does that mean to me? What is that dollar value?

You can go through these kinds of deliberations to come up with some kind of a return on investment scenario, some picture, so that you satisfy yourself as to whether you made the right investment, or not.





## Gross Margin (GM)

**Gross Margin (GM) \$ = Selling \$ - Cost \$**

Or

**Gross Margin (GM) % = (Selling Price - Cost) x 100 /  
Selling Price**

Example:

**Selling Price of an Item: \$60.00**

**Cost of an Item : \$40.00**

Then

**GM% = (60 - 40) x100 / 60 = 33.33%**

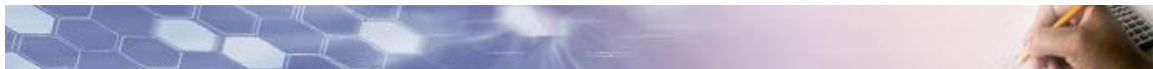


### SLIDE 17:

Now we're going to talk about some of the formulas that apply to these metrics that we mentioned.

Margin obviously is the difference between selling and cost. The formula for gross margin is selling price minus cost divided by selling price and to express it as a percentage, multiply by one hundred.

Example: selling price of an item is \$60 and our cost on that item is \$40. Applying the formula, 60 minus 40 divided by 60 and multiplied by 100





(because we want to express this as a percentage) gives us 33.33% gross margin.

For markup, you divide it by cost so for the same scenario for the same price and same cost you end up with a totally different number (50%).

That is why I said at the beginning do not mix these two up because your starting numbers are the same but the outcome, the resulting numbers, are totally different.

So if one person is talking gross margin and the other person is talking markup the whole thing is going to get totally out of whack. In fact huge mistakes have been made because of mixing these two up.

For the same numbers; \$60 selling price and \$40 cost markup is 50%. What was gross margin? 33.33%... that is a huge difference.

So why do some people use gross margin and others use mark up?

Some people use markup because we didn't always have calculators available everywhere and certainly would not have had computers available everywhere and calculation of markup is very simple.

Why do I like gross margin better? And why are they both being used in the same organization?

In the product side of things they usually talk about markup more than the operations side, because suppliers come in and they say, for example these are new products that I have and the cost is \$60 you can do a 100% markup on this, what they are saying is if the cost is \$60 you can sell it for \$120 that is 100% markup - very easy to calculate,

The beauty of gross margin is when you tell me you have 40% gross margin I know for every hundred dollars you sell you're taking \$40 to the bank.

Whereas when you tell me you have 40% markup you are not taking \$40 to the bank so now I have to sit down and actually figure out how much money is being taken to the bank because it is not going to be \$40.

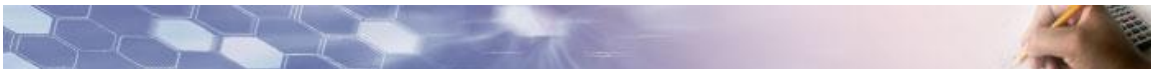
The gross margin percent is the amount you are taking to the bank. It is clear and that is why we like gross margin more because I want to know





when I go to the store manager and say what is your gross margin for the day and he says 30% I know what I am dealing with. And, I can go to another store and say what your gross margin is for the day? If it is 35% I know that store is more successful than the other one.

I have an immediate understanding of the profitability.







## Typical Gross Margin Values

Women's Shoes:	44.3%
Men's Shoes:	54.6%
Women's Sportswear:	47.3%
All Women's Apparel:	51.2%
All Men's Apparel:	51.5%
Cosmetics & Drug:	28.6%
Luggage:	48.1%
Sporting Goods:	32.2%
Furniture:	47.1%
Electronics:	27.1%

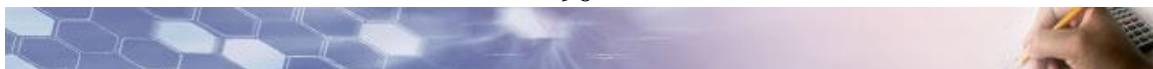


### SLIDE 18:

These are some typical margin values. They are a little bit aged because we got these numbers from the government and we all know the government takes their time to come up with final numbers.

Another point to be made is these gross margin values are the total gross margin not just the POS margin.

As you may know it's not unusual for us to get some rebates from vendors at the end of the year and they also supply us with co-op dollars – that's when we go and do some marketing they may pay 50% of the marketing cost for example.







Anyway, we need to put those amounts back to your gross margin calculation. Usually you end up with gross margin numbers that are slightly higher than the POS gross margin.





## Markup

$$\text{Markup} = (\text{Selling Price} - \text{Cost}) / \text{Cost}$$

Or

$$\text{Markup \%} = (\text{Selling Price} - \text{Cost}) \times 100 / \text{Cost}$$

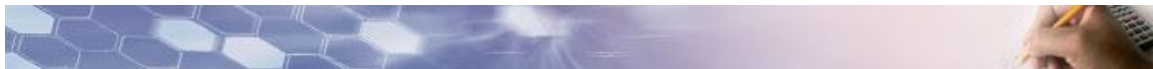
Using the Same Example:

$$\text{Markup \%} = (60 - 40) \times 100 / 40 = 50\%$$



### SLIDE 19:

We have had this discussion already, the difference between GM and Markup formulas is with Markup you divide the differential by cost instead of selling price.





## Money Making Idea #1

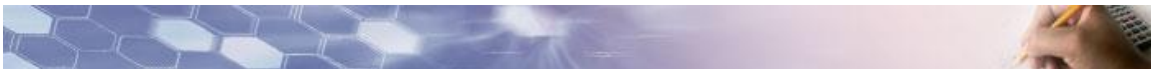
### Breakage:

- 1 out of 5 Gift Cards Unredeemed (5B in 2009)
- Double Edged Sword (61% of Customers who redeem gift cards spend more than the gifted amount)



### SLIDE 20:

Okay, money making idea number one - gift cards - did you know that one out of five gift cards are not redeemed? So this gift card business is a very lucrative business. If you are not doing it make sure you get into that business because one out of five, or 20%, won't be redeemed. Although, you can see that as a double-edged sword, because 61% of customers who redeem the gift cards spend more than the gifted amount. In any case, you really can't lose.





## Weeks of Stock

**Weeks of Stock : Value of Inventory (at Retail) / Average Weekly Sales**

Example:

Inventory level: \$8,000.00  
Total sales of product for the past 6 weeks is: \$12,000.00  
Average weekly sales =  $12,000 / 6 =$  of **\$2,000.00**

**Weeks Stock = \$8,000.00 / \$2,000.00 = 4**

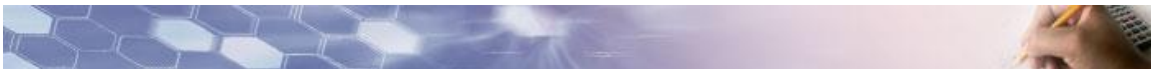
This means that if you did not replenish your inventory and sales continued at the same pace, you would deplete your inventory of that product to zero within 4 weeks.



### SLIDE 21:

Back to retail math and weeks of stock. It's a quick evaluation of the inventory level. Basically that is what this is. Say a certain item is of interest for you that day or that week because while you were travelling around you went to one store and saw that they had way too many of these. So, let's check it out.

First thing you do is to look back through their sales numbers as far back as you can reasonably go but do not bring in any anomalies. For example,





the Christmas period would be an anomaly, Valentine's Day's an anomaly. These are spikes and not repeatable during regular store sales days.

We went back six weeks in this example. Let's go through the example- inventory level is \$8000 on this item; about \$8000 worth of product and total sales of product for the past six weeks is \$12,000 .

We want to find out the weekly sales average – so, \$12,000 divided by 6 is \$2,000. So these guys are selling \$2000 a week of this merchandise. How many weeks of stock do they have?

\$8,000 divided by \$2,000 equals 4 weeks of stock.

Now is this too much or is it too little? Well, it all depends on your replenishment rate.

If you have a warehouse in the same city and you can replenish this in a day or two obviously they have way too much stock. One week of stock is plenty for them because you know, in the worst case scenario, you could replenish it in 3 days.

But if the merchandise is coming from China it's going to take two, three months if you're lucky so then they have a limited amount and they are going to run out before they are going to get the replenishment all the way from China.

It all depends on how fast you can replenish your inventory, but it's a very good quick indication so that you can make some decisions.

If they have, for example, mountains of certain product and you know they are not going to sell through quickly enough, you want to redistribute the excess to the other stores.







## Inventory Turns

Usually expressed in annualized terms

$$\text{Inventory Turns} = \text{Sales} / \text{Average Inventory}$$

Example:

Annual Sales: \$12,000,000

Average Inventory throughout the year: \$3,000,000

$$\text{Inventory Turns} = 12,000,000 / 3,000,000 = 4$$



### SLIDE 22:

Inventory Turns: Sales divided by average inventory. Average sales - we're doing this for a small retail company – of twelve million dollars and the average inventory throughout the year is three million dollars.

How to calculate the average inventory throughout the year?

You are not going to be able to do physical counts every month so that I take the inventory level from your information system POS or whatever you have and you are







going to take an inventory level at the beginning of each month and then at the end of the year so you end up with 13 numbers and then add those all up and divide by 13.

That is going to give you the average inventory you carry throughout the year,

In this example you have done the calculation and you came up with \$3 million average inventory so 12 million in sales divided by 3 million average inventory is going to give you four turns.

It is not a bad number - four turns if your margin is respectable - that's somewhere around 45%, 50% four turns, this is a pretty good number but here are some numbers for you.





## Typical Inventory Turn Values

Women's Shoes:	4.1
Men's Shoes:	2.5
Women's Sportswear:	6.0
All Women's Apparel:	7.1
All Men's Apparel:	4.4
Cosmetics & Drug:	3.9
Luggage:	7.3
Sporting Goods:	3.7
Furniture:	3.3
Electronics:	3.5



### SLIDE 23:

Although there are exceptions, of course, the general rule is, higher the margin - lower the turns. Then, there are perishables which you cannot keep on the shelf for more than two days so you have to turn them fast - we did not put "supermarket" here because perishables are just crazy numbers.





The other extreme is very high-end jewelry but they are not going to sell a \$50,000 ring every day so the turns are going to be low but the margin on that \$50,000 ring is huge so you kind of balance the turns with the margin.

The thing is finding the high-turn, high-margin products, then you would be laughing all the way to the bank.





## Money Making Idea #2

### Deadlines

- Time Limited Offer
- Don't bury the Expiry Date in Fine Print
- Customers get irritated



### SLIDE 24:

Money making idea number two – deadlines on time-limited offers. I don't know if you do this but a lot of companies do time-limited offers and bury the expiry date deep in the fine print.

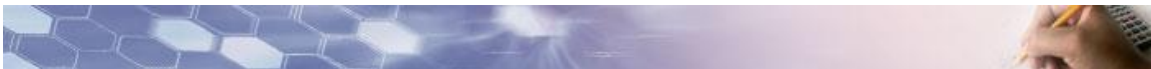
The customer gets this offer and they look at it they say 'this a great idea- this is what I need but not right now' so they take the brochure and neatly put it aside.

And then later, when they think they are going to need that item, they finally read the fine print and find that the offer has expired.





So, you not only lost a sale you also irritated the customer. Really, I do not know why people bury the expiry date in the fine print. Why not just put it in average font? Anyway, as obvious as it sounds when we point it out go home and take a look at some of the flyer's you got from the pizza company - never fails, the expiry date will be buried.







## Gross Margin Return on Inventory Investment (GMROII)



$$\text{GMROII} = \text{GM}\% \times (\text{Sales} / \text{Avg. Inventory})$$

Example:

Still using the same numbers from Gross Margin calculation, assume that the store's net sales over a period of 12 months is 24M and during this time it carries an average inventory of 4M. Then:

$$\text{GMROII \%} = 33.33 \times (24 / 4) = 199.98\%$$



### SLIDE 25:

Back to retail math. I said gross margin return on inventory investment is arguably one of the most powerful calculations.

There are two reasons. Let's look at the formula first - GMROII gross margin return on inventory investment is gross margin percent times sales divided by average inventory (which is also turns).

In the example, we are using the same gross margin number from the previous calculation 33.33%, the store's net sales over a period of 12 months is \$24 million and during this time it carries an average inventory of







\$4 million so that is 6 turns - obviously pretty healthy turns- that gives us 199.98% GMROI.

Here is why this formula is so important. In this case, on every hundred dollars of inventory I purchase my return is \$199.98.

A hundred dollars is my money, and I made \$99.98 - it's a pretty good deal. The other reason why this formula is so powerful - look at what it contains; right in the formula itself-Gross Margin percent is your profitability, sales is your indication whether your organization is able to sell inventory and average inventory is your ability to first of all find the right products, distribute them properly and keep healthy control over your inventory level.

So, this formula contains three of retail's most vital operations. That is why it's so important.





## Other Gross Margin Return on Investment Calculations



### ➤ GMROF (Gross Margin Return on Sq.Ft)

$$\text{GMROF} = \text{GM\%} \times (\text{Sales}^* / \text{Sq.Ft.})$$

### ➤ GMROL (Gross Margin Return on Payroll)

$$\text{GMROL} = \text{GM\%} \times (\text{Sales}^* / \text{Labor Costs})$$

\* Sales amounts correspond to particular space or labor force in equation.

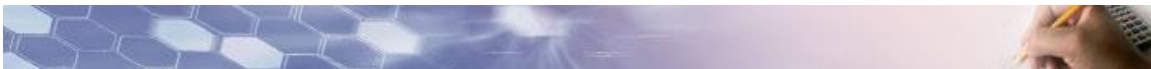


### SLIDE 26:

You can measure GMROF on the actual selling floor but you can also do it for the walls and fixtures.

People talk about which wall is better or which fixture is better.

But they are just talking and coming up with these opinions based on gut feel.





Yet with the use of GMROF you can measure which wall is the best wall and which fixture design is the winner, scientifically.

Merchandise one wall with certain products and the other with different products, measure GMROF for both walls for a month and then swap the products and measure GMROF for both walls for another month, you'll get your scientific answer.

Same for the fixtures, and the fixtures do not have to be the same size or design because it's all compared based on the area that is merchandised.

Large companies like Walmart and Target use this formula to decide which kind of display fixture they should go with and they do this on an ongoing basis and that is how they decide on what fixture they should be deploying.

And you can do the same analysis for your staff – GMROL - you pay certain amount of money to one individual and certain amount of money to another individual.

Well, you look at their sales and you look at the gross margin they are generating. As you know some people sell cheap stuff, they might sell a lot but the gross margin on the cheap stuff was not very high so their gross margin dollars are going to be low so you cannot just decide by sales only.

This formula will give you much better information. Instead of just looking at the sales numbers you have a much bigger picture, because profitability is included, and sales and their staff cost is included.

These are very powerful formulas for you to use and compare the people in the stores. And you can look at the whole store in terms of payroll cost and sales and the gross margin profitability. It's going to give you an idea which stores are really doing better in terms of their contribution to the bottom-line.





## Money Making Idea #3

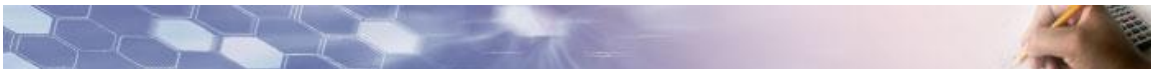
- Offer Placement
  - Don't bury the offer in the copy
  - Place it front and center
  - Make it Visible



### SLIDE 27:

Moneymaking idea number three - offer placement: when you make an offer make sure that it's clearly visible and clearly expressed and communicated to the customer.

Some people tend to say a lot of different things in their offers – a lot of little bits that customers may just miss. So, be very clear.







## Key Performance Indicators

### ➤ Sales compared to last year (or any other period):

Actual sales \$ for a given period / actual sales \$ for the period you want to compare to

### ➤ Sales compared to budget-target:

Actual sales \$ / budget-target sales \$

### ➤ Sales per Square Foot:

Actual sales \$ for a given period (usually a month or a year) / the total floor area (in sq.ft.) of the store.

There are variants of this indicator in terms of sales per square foot of merchandisable area of choice (like walls and display units.)

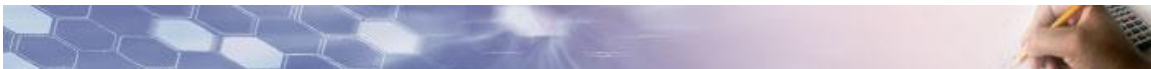


### SLIDE 28:

Now we are going to talk about the key performance indicators that are standard in most retail organizations meaning that most of the retail organizations - almost 95% of them- will measure and report on these particular on a daily or weekly basis. And then, of course, monthly, quarterly and annually.

First is sales compared to last year. Why do we compare to last year?

Because we want to grow the business and everything else being equal if you've been in that location for another year you're better known in that marketplace.





Customers know where you are and you have one year more experienced staff and it's quite normal and natural to expect that you should do more than what you did last year.

As we said, everything else being equal obviously.

This assumes there were no major disasters in the trade area, no huge influx of competition. It also assumes that you didn't see a brand new neighborhood being built, increasing the customers for your store.

Generally speaking, we want to look at the previous year because we want to see some organic growth. We want to see that the operation is maturing and that is why we compare to last year.

Second thing we do is we compare the sales to the target, budget or plan – these all tend to be used interchangeably - assuming that the targets are set properly, which is easier said than done.

A lot of retailers operate with crazy budgets and crazy targets and that is why it is so important to measure this.

Planning for the fiscal year what do we do? We do a forecast where we say we are going to do \$1 million in sales in this new year and that is how it starts. Then you construct the operating statement starting with that forecast.

You say I am going to do \$1 million this year. Then you have your margin - your expected margin after Cost of Goods Sold (known as COGS) - say 50% so you have \$500,000 towards expenses and profit.

Hopefully, you do not spend all of it because you want some profit leftover at the end. So, I have \$500,000 and then I figure out what the expenses are for the rent, the payroll and all the other items that go into an operating statement - like insurance, POS charges, marketing, etc.

After all that, hopefully you come up with some money left over, which we call gross profit before taxes.

The reason why you have to be watching your sales compared to your target is because all of your expense items have been calculated based on that number.



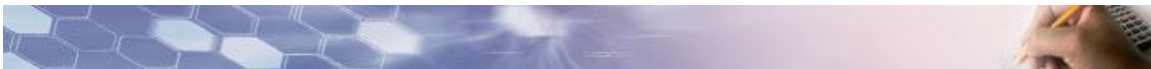




If you are not achieving your targeted sales numbers but you're spending as if you were, then you are soon going to be bleeding red ink and you have to do something immediately.

If you continue along those lines you are going to start losing money and you do not want to do that.

That's why you need to stay very focused on sales compared to target, or budget.





## Key Performance Indicators (Cont'd)

### ➤ Sales per Hour (for store or associate) – selling hours only:

Actual sales \$ for the store / # of selling\* hours during the same period

\*selling hours are used here rather than total labor hours

### ➤ Sales per Hour (for store or associate) – total labor hours:

Actual sales \$ for the store / # of labor hours used during the same period

### ➤ Average Sale per Customer/Transaction:

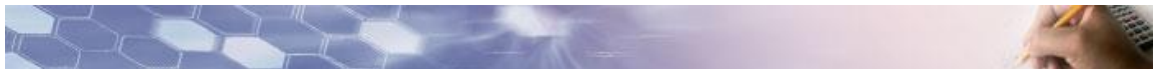
Total sales \$ / # of customers or transactions



### SLIDE 29:

Sales per hour is usually a number we want to know. This is your indicator of how good your salespeople are.

As you know, the lousy salespeople usually sell the most inexpensive items and usually sell the items that are on promotion – in both cases there is not likely a lot of gross margin.





On the other hand, the skilled salesperson will have a conversation with the customer and find out what the customer's needs and wants are and what the requirements are and they will find the best matching product or best matching solution to this customer's needs.

They are not worried about the price of the item they are only worried about knowing what the customer wants and finding the right product for that customer and that product may be the most expensive item in the store and, depending on the customer, there are customers who are very price sensitive and there are customers who do not care - they can afford the most expensive item so, if that is what they want, they'll buy it.

You would not know that unless you have a good sales conversation which requires sales skills.

By watching your sales per hour, average sale per customer or transaction you will be able to determine which of your salespeople are good and which are not so good... and take action in terms of training and/or coaching.





## Key Performance Indicators (Cont'd)



### Units per Customer/Transaction:

Total number of units sold / # of customers or transactions

### Conversion rate:

# of transactions / # of customers who entered the store  
(*Typical Values: Convenience & Grocery Stores: 100%, Jewelry: 15-20%, Avg: 25-35%*)

### Wage Cost:

Actual wage \$ paid / by actual sales \$ achieved

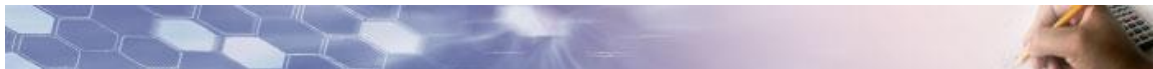


### SLIDE 30:

Skilled salespeople are not scared of the customer- just selling one item and then thinking that this is all there is to it.

No, the skilled salesperson will continue selling to the customer.

In fact our recommendation to salespeople when we train them, is keep selling until the customer says "no" or "stop" (verbally or non- verbally)





because that is the only way you are going to know if the customer is ready to stop. Sometimes we see that our training gives sales people - who used to sell one or two items – the skill and confidence to sell four or five items. They learned that lots of customers like suggestions.

Conversion rate, obviously, is how many people came in and how many people bought so if we had a hundred people come in and 25 people purchased that means we have 25% conversion.

Typical values - obviously convenience stores and grocery stores nobody goes there to look around so their conversion rate is very high, close to 100% - but when it comes to jewelry, usually before you buy jewelry you want to see some other stores and some other designs and different products so jewelry is typically a higher-priced environment and will have lower conversion because people shop around before they purchase.

Overall, across the board, average conversion rates are about 25% to 35%.

Wage cost - we are going to measure it as a percent of sales and some of the typical wage cost percentages are here.







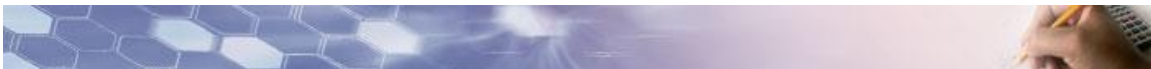
## Typical Wage Cost % to Sales

Type of retailer	Payroll as % of sales
Apparel, women's	12.3
Apparel, men's	13.4
Apparel, children's/infants	10.2
Camera/photography supplies	14.4
Computers (custom assembly)	9.9
Confectionery and nuts	15.5
Furniture/home décor	13.9
Hobby, toys, and games	9.5
Nursery and garden centers	10.0



### SLIDE 31:

If you have 40 to 50% margin, than 10% wage cost will be a good number. Although, the lower the better and you can lower wage cost by increasing the sales.







## Money Making Idea #4

- Reason Why Advertising
  - Give reasons to buy
  - Have lots of reasons
  - If you don't have reasons, don't advertise

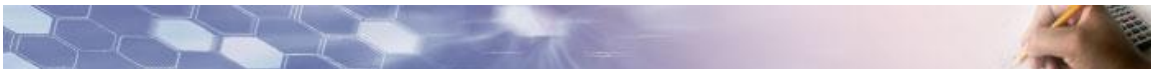


### SLIDE 32:

Money making idea number four - find reasons for people to buy. Sometimes we call it the unique selling proposition... Why should they buy from you? And that should be well known throughout the organization.

All staff should know why customers should buy from your store but what are you offering that is unique; what's different? One thing that is very powerful and that is a good exercise if you do not have a unique selling proposition is to develop one and share it with your staff.

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## Key Performance Indicators (Cont'd)



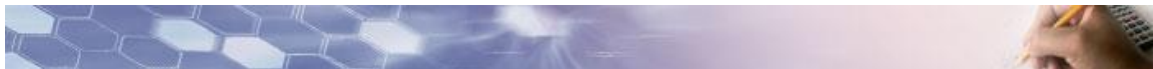
- Average Wait Time at Cash
- Professionalism of Sales Associates
- Critical Error Rate
- Customer Satisfaction Level
- Customer Complaints



### SLIDE 33:

Okay, those were the key performance indicators that we call *standard* key performance indicators. But the very nature of key performance indicators means that anything that is bothering you in terms of performance can become a key performance indicator for you.

Whatever the timeframe might be, you may take an issue that is bothering you and turn it into a key performance indicator and then put some targets in place and start measuring and monitoring and reporting on





that, and then assign a time frame. We're going to talk about this because we are going to move onto the subject of balanced scorecards soon and it's all about deciding what is the most important, challenging issue for you and then turning that into a key performance indicator and then putting it into a balanced scorecard so that you can measure and monitor and report on it on an ongoing basis.

Some of the other things that may turn out to be a key performance indicator for you- for example, it could be customer satisfaction level.

Earlier, we said you could always ask the customer - after they have made the purchase and as they are leaving the store - "so, are you satisfied"? If you get, say for example 70% satisfied response you may say a 70% is not satisfactory to me, I want to move this to 90%.

So, you declare the new benchmark, a new target and then you tell people - you say right now we are doing 70% in customer satisfaction and I want to move that to 90% so let's have some new ideas.

What are we going to do to make sure – within, say, three months - we hit 90% satisfaction level? And then you start reporting on that on an ongoing basis.

If your people see the improvements and they get motivated and they do bigger and better things to ensure customers are satisfied you will likely hit your 90% in three months.





## Key Performance Indicators (Cont'd)

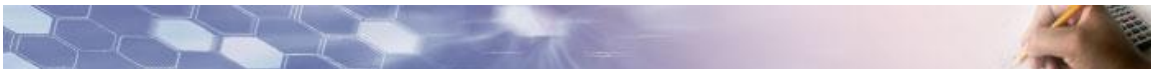
- Self Service Ratio
- Store Expenses/Sales Ratio
- Shrinkage/Sales Ratio
- % of Total Stock not Displayed



### SLIDE 34:

Some of the other things might be store expenses. In some chains, Store managers or will have petty cash and they use it to buy, for example, stationery, toilet paper, etc.

Well, you may find that the petty cash or store expenses are out of control and that becomes a key performance indicator for you because right now it's a big challenge - it's a big issue - and you want to fix it so you announce it as a KPI. We are going to come back to this during the balanced scorecard discussion a bit later on.







## Open to Buy (OTB)

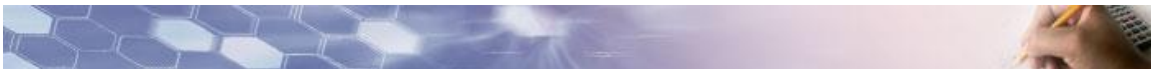
- Inventory purchase budget based on sales plan (Target)
- Usually done at the category level, if necessary, you can drill down to sub-levels even down to SKU level



### SLIDE 35:

Open to buy is an inventory purchase budget. Just like you have a sales budget, a buyer has an inventory purchase budget so, generally, here's the way it works.

Just like sales, and based on targeted sales, the buyer does monthly inventory purchase budgets.

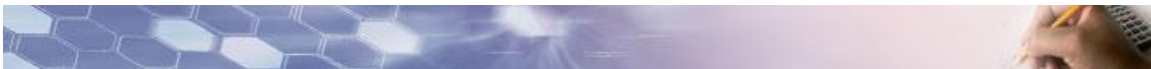




The buyer works out end of month inventories for the whole year and if you are operating a large chain then what you do is cluster the stores into groups and then each type will have their own end of month inventory levels.

You have to supply the inventory to make the budgeted or targeted sales happen - that is the whole idea.

It's usually done - the planning is done- at the category level but nowadays because our computer systems are so sophisticated, and the costs have come down dramatically, we can go all the way down to SKU level, depending on the number of SKU's you have.







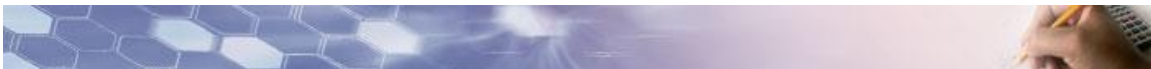
## OTB Formula

- Desired End of Month (EOM) inventory
- Plus sales and markdowns
- Minus Beginning of the Month (BOM) inventory and on order and receipts
- Equals Open To Buy



### SLIDE 36:

So, the formula for the open to buy... you start with the desired end of month inventory which you have budgeted already and you add to that your sales and markdowns and then you start subtracting. First of all, subtract the inventory you had at the beginning of the month – obviously, when you take the store at the beginning of the month it's not empty...there are displays of merchandise and a certain amount of other merchandise left over from the previous month, so you have to take that out. And, then look at how much you ordered in advance and then the remaining number is your open to buy.





## Open To Buy: July

Desired EOM	108,000	(Aug BOM)
+ Sales	32,000	(Jul Plan)
+ Mark Downs	2,000	(Jul Plan)
= <b>Inv. Required</b>	<b>142,000</b>	
- BOM Inventory	72,000	(Jul BOM)
= Open To Rec.	70,000	
- On Order	40,000	(Jul On Order)
= <b>Open To Buy</b>	<b>30,000</b>	



### SLIDE 37:

It sounds a little complicated but when you put down the numbers it's pretty straightforward. Assuming that we are doing an open to buy for July and at the end of the month we want \$108,000 worth of inventory left in the store... that is our end of month inventory. And, for July we budgeted sales of \$32,000 and we also know that we are going to have





to take \$2,000 worth of markdowns because we have some old discontinued products that we need to get rid of.

Then, total inventory required for the beginning of July is \$142,000 then you look at what inventory you started out with in this case \$72,000 that leaves you with open to receive \$70,000. Therefore this store needs \$70,000 in total purchases for July. You

placed some orders well in advance and the amount of that is \$40,000 so that leaves you with \$30,000 in open to buy.

The question becomes "What do you do with this \$30,000?" You still have to spend this \$30,000 for the store otherwise they won't achieve their sales target.

You can buy staple items, the stuff that you know you sell on daily basis. The store is known, by customers, for that kind of product. For example, in a ladies apparel business it might be a black blouse - a black classic blouse - that always sells. That would be a safe bet, or you may decide to buy something a little bit different – like promotional items.

Let's look at Sell-Thru using an example where you've decided to purchase a promotional item for a store with the open to buy amount you have.





## Benefits of OTB

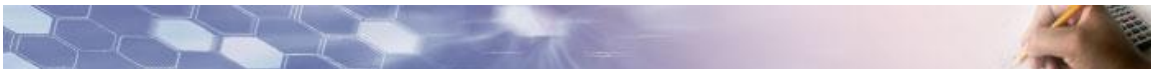
- Estimate in advance capital required for inventory
- Ensure right inventory levels for planned sales
- Control merchandise commitments
- Establish objectives so that actuals can be compared with
- Provide opportunity for more profit



### SLIDE 38:

Before we do that let's give you the benefits of the open to buy: it's going to tell you what kind of capital is required for inventory so your finance people can figure out the cash flows and anything else and it's going to make sure that inventory levels are properly planned to make the sales and you will have better understanding of what kind of commitments you have for each store for each region of the company.

Also, you can establish goals and objectives to compare with to see if you are achieving your targets or not. And, finally, because it's a disciplined way of purchasing product inventory it's going to increase your profit.







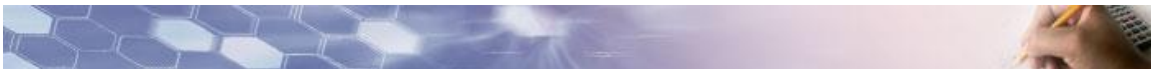
## Money Making Idea #5

- ◆ A Guarantee
  - ◆ Guarantee what you sell
  - ◆ If you can't guarantee what you sell...
  - ◆ Find something else to sell



### SLIDE 39:

Moneymaking idea number five - guarantee what you sell. If you cannot guarantee what you sell find something else to sell. That is an important thing... whatever you offer, you've got to be able to guarantee it because it demonstrates that you believe in the product you are selling.





## Sell Thru

- Velocity with which inventory is being sold
- Leading indicator for tracking inventory performance
- Useful for predicting outcomes



### SLIDE 40:

Sell-Thru: We are going to look at Sell-Thru quickly through that open to buy of \$30,000 that we had in the example above. Let us assume we are buying a promotional item for say, Halloween.

We are going to bring the product in and we are going to price the product and take certain discounts to make sure that at the end of the







Halloween day which is October 31<sup>st</sup>, everything is gone because you do not want to sit on the product for a year and you are not going to be able to sell Halloween items any other time so whatever you do not sell at the end of Halloween is going to sit there - you do not want that so you are going to come up with a scenario to make sure that you clear it out at the end of October.

So we purchased the item and we are going to come up with a scenario on how this is going to play out. Here's the plan:





## Example of Sell Thru Scenario

### A Typical Mark Down / Sell Thru Cycle For a Promotional Product



#### SLIDE 41:

I am going to keep it at the full price for 60 days. Then, I am going to discount it by 30% and if I did not clear everything out I am going to discount it further - down to 60%. And finally if there are still a few of them left I am going to blow them out because I do not want any of this merchandise left in the store after Halloween.





## Sell Thru Scenario for the Previous Cycle

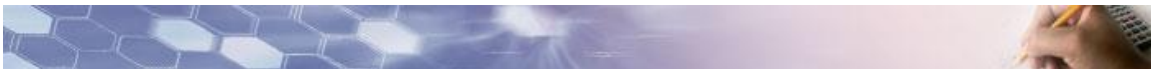
<i>To Obtain Different Scenarios, Try Changing MD Amount</i>									
Mark-Down Timeline	Full Price	Sell Price	Margin %	Cost	Units Left	Units Sold	Sell-Thru %	Total Sales \$	Total Margin \$
Days 1-60	59.99	59.99	50.0	29.99	600	330	55	19,796.80	9,900.00
Days 61-90	59.99	41.99	28.5	29.99	270	108	40	4,534.92	1,296.00
Days 91-110	59.99	23.99	-20.0	29.99	162	48	30	1,151.52	-288.00
Days 110+	59.99	5.99	-80.0	29.99	114	114	100	682.86	-2,736.00
			31.23	17,994		600		26,166.1	8,172.00



### SLIDE 42:

We create a spreadsheet, like the one you see on the slide, to see how the numbers play.

The item we bought costs 29.99, and we priced it at 59.99. We're targeting 50% margin, and we purchased 600 units.





During the first sixty days we sold 330 units—Sell-Thru is 55%. And we brought in \$19,796.80 in total sales. And \$9900 in gross margin.

Then, we reduced the price by 30%, margin dropped down to 28.5%, we reduced it to \$41.99 for 30 days. And during this time we sold another 108 units. Sell-Thru for this period is 40%. (108 divided by 270 multiplied by 100). We brought in an additional \$4534.92, and \$1296 in gross margin.

And now we're deep discounting it. Margin went negative because we're selling it below cost. And during this time we did 30% sell-thru, we sold another 48, brought in \$1151.52, and we lost \$288 because, as I said, we're selling it below cost.

And finally we're blowing it out at \$5.99. Margin went to -80. All 140 units that were left sold. 100% sell-thru for this period. Additional \$682.86 came in, and we lost \$2736.

When you look at the whole picture, we made additional revenue, or sales, of \$26,166.10, and additional gross margin, or gross profit, of \$8,172.

Is this good or is it bad? Well, that's where the buyers are graded and how the buyers are measured because one person could do much better than this yet another person might do much worse than this. But, you can play with the scenarios. You may want to keep the full price for 30 days only, and then take lower discounts, and see because this spreadsheet is obviously dynamic, so as you change the duration of the time and the markdown amount, this whole picture changes—all these numbers here change.

So you can see how doing different things may impact and affect the overall results. But generally speaking, it's not bad. We created an additional \$26,000 and \$8172, so this is one of the things buyers and the product people play with to come up with the optimum results.





## Money Making Idea #6

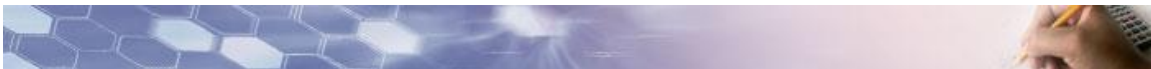
### Testimonials

- Happy clients telling others...
- Best time to ask for it is when they say they are happy.



### SLIDE 43:

Testimonials are very important. Make sure that you get a sentence or two from happy customers and put it somewhere where others can see. I know a lot of retailers don't do that, but it should be done. Other people will take it very seriously because it's someone else's opinion, other customers just like them.







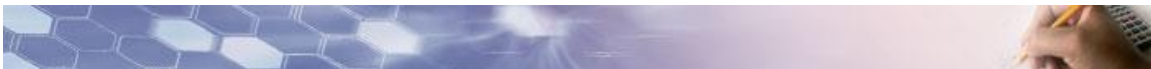
## Balanced Score Cards

For  
Retail Management



### SLIDE 44:

Now we're going to talk about balanced scorecards. Balanced scorecards is a business management concept. And the most important part of this concept, or tool, is that it immediately transforms strategy to action, just by its nature as I'm going to explain it to you.





## Balanced Scorecard

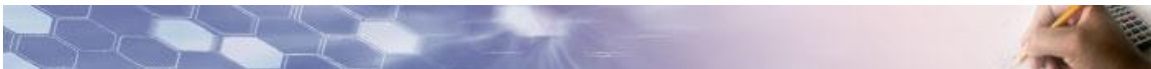
- Business management concept
- Transforms strategy to action
- It allows you to share your strategy and vision with others
- Improves performance by measuring what matters.



### SLIDE 45:

The transformation or communication of strategy—what you're trying to achieve—to your staff is the advantage of this tool. And it improves performance by measuring what matters.

Remember we talked about generating key performance indicators? We have the standard key performance indicators that we want to look at at all times, like the sales





compared to last year, like the sales against target, dollars per transaction, units per transaction, etc. These are the standard ones you're going to look at.

But then, what we want you to do, is look at your most pressing challenges. They may be different than standard KPIs—for example, hiring. Hiring is usually a great challenge for store managers and district managers, because it's difficult to find good people.

You can turn that into a key performance indicator and the key is once you turn that into a key performance indicator, you have to specify the metrics. So you said, I have to improve my hiring. What is the metric? How are you going to measure improvement in hiring? So one measure could be the sales these individuals are doing in the first 3 to 6 months. Another measure could be, if you hire the right people, usually they stay longer. The right people are going to be happier. They're going to be better performers, which leads to happier employees, and then they're going to stay longer. So you may use the retention as the metric. You say, "My average retention now is 9 months. I want to move it to a year—12 months." So retention becomes your metric.

The key is when you decide on a challenge issue and turn them into a key performance indicator—what did we say right at the beginning? "If you cannot measure, you cannot manage." So you immediately have to come up with the metrics for that issue, for that challenge. And then you're going to put targets. But right now you said, if we're using the same example (hiring retention issue) you're saying, "9 months is what's happening right now, but our new target is 12 months," so what do I need to do in terms of my hiring to move the retention of my good employees to 12 months? That's where you're going to spend your time. And then, you're going to measure your progress. "How am I doing?" "Starting now, (we have 9 months), how is it looking next month, and the next month? and 2 months later and 3 months later?"





Because you have that ability to measure how long the people are with you and you know how fast you're losing them and how long they're staying, then you can measure and report on this.

This is your key performance indicator, and you say "okay." Your retention is now 9 months. Now how does your retention move up in 3 months? Let's say, "You moved up to 10 months, not bad." But you still have not quite achieved the 12 months target that we have put for ourselves, but you are on your way, and one of the important things about the balanced scorecard is that it is going to include all these important issues.

When you do the balanced scorecard, all those important challenges are going to be included in that balanced scorecard, so when you look at your balanced scorecard numbers, because balanced scorecard is like a "grade card" that you used to get from school: how many A's, how many B's, what's the number.

At the end of your balanced scorecard, you have one number to deal with, and that one number covers your important issues at the same time. With the balanced scorecard, with one number, you're addressing all the important areas, not just profitability, sales, and inventory, but a number of others. The key is not to get lost in numbers. You have to be very focused.





## View of the Store

- The **Financial** Perspective
- The **Customer** Perspective
- The **Business Process** Perspective
- The **Learning and Growth** Perspective

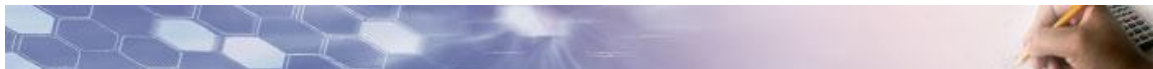


### SLIDE 46:

And here's why we call it balanced. The way that you look at your business, and the way you look at your store(s).

You're going to look at it from the Financial perspective, you're going to look at it from the Customer perspective, and you're going to look at it from the Business Process perspective.

Business Process perspective means all of your internal processes and procedures like your Human Resources manual, your operating hours,







anything and everything that is internal is included in this business process perspective.

Finally, Learning and Growth perspective. If you want to do better business on an ongoing basis, you're going to need better people. Now, how are you going to get better people? You are going to grow them. So you have to make sure that they are trained properly and that they continue in constant training.

You should make sure that they're growing not just professionally, but personally as well, because as the personal growth happens, they're going to be much more effective in terms of building rapport with the customer. Knowing how to approach the customer, how to talk to the customer.

So as they get more sophisticated they're going to start doing much better in terms of their professional performance as well. You're not just going to look at their professional growth, you're going to look at their personal growth. Maybe you're going to suggest some books to read. Some magazines to follow, or whatever else you're going to come up with depending on your environment. And definitely you're going to have training, and all that good stuff.

That's the idea of a balanced scorecard, that's where the balance comes from, we're not just looking at the financial perspective, we're looking at different angles of the operation so that it kind of balances itself out.

Alright, now the idea is to get three to four key performance indicators in each of these perspectives, but if you feel like you're doing great in one perspective, or if there's not much you can do to impact the business in a particular perspective, then you don't have to do them all. For example, if you're not in charge of policies and procedures, you may not be able to impact the Business Process part.

So, just do either one KPI or, perhaps, you may even ignore that perspective completely. But just to follow the proper process, we're going to look at these four angles.





## Pros and Cons of Scorecards



- Main limitation is the fact that you have only partial representation of your business.
- Main advantage is having a numerical value to describe performance, which makes it easier to control your business.
- Ability to specify weights to each performance area (i.e. balance them) provides great flexibility.

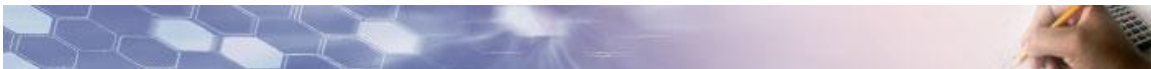


### SLIDE 47:

What is the limitation? The limitation of the balanced scorecard is the fact that you're only selecting a few KPI's for each perspective because you cannot focus on fifty or a hundred things.

You have to reduce the number of issues you're going to tackle.

You're going to look at the most pressing problems, challenges, issues that you're having, and you're going to attack them first.





And then once you've fixed them, you can throw those out of the balanced scorecard and bring the new ones in.

You're going to go through some prioritization. Even within the balanced scorecard, once you decide the KPI's, you're going to prioritize those KPI's.

So there's three sets of prioritization going on in the balanced scorecard process.

As I said earlier "The main limitation is the fact that you have only partial representation."

That means that when you're choosing your KPI's, you have to be extremely careful because you're not taking everything under the sun into consideration because you just can't.

It's too much for any human being. Even for superwoman or superman, it is too much.

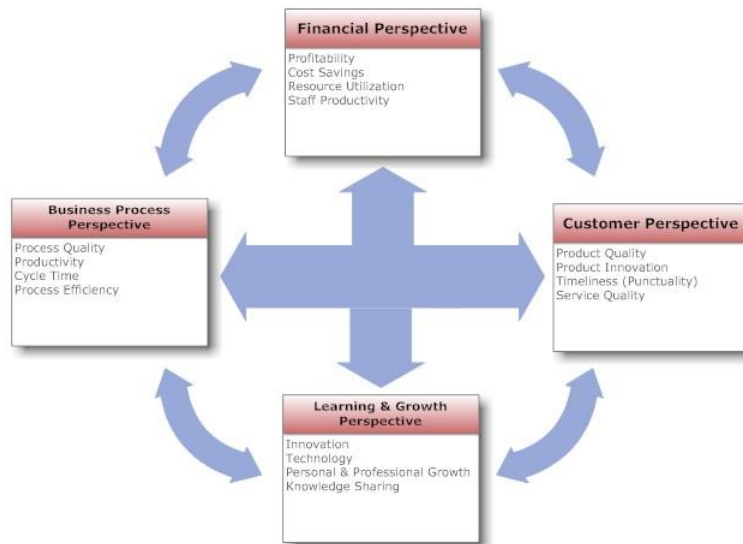
So we have to limit the issues that we're dealing with. Others will have to wait. That's what prioritization is all about.

What are the most important issues right now? The main advantage of balanced scorecards is having a numerical value that will describe the whole thing for you—just one number.



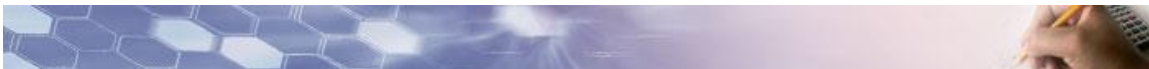


## Balanced Score Card (Graphical Representation I)



### SLIDE 48:

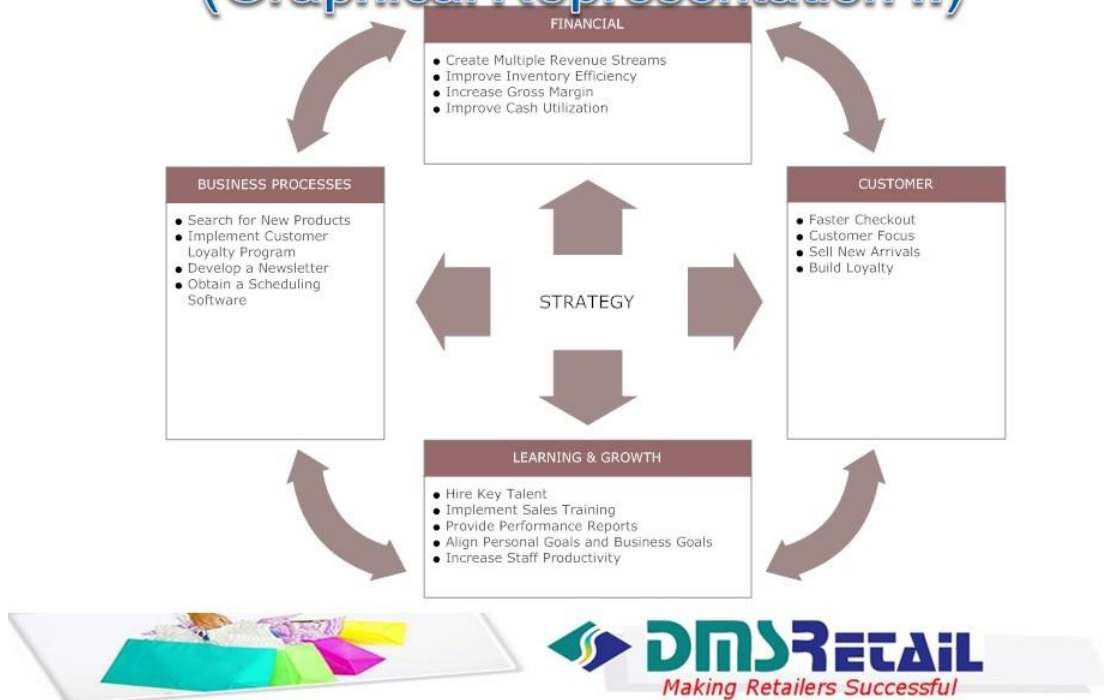
Let's continue. How do we build it? Everything flows from strategy: financial perspective, profitability, cost savings, staff productivity. These are the big issues. You're going to take these and bring them down to KPI's, metrics, targets, product quality, product innovation, timeliness.





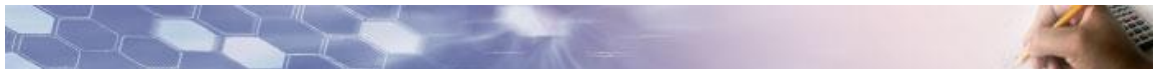


## Balanced Score Card (Graphical Representation II)



### SLIDE 49:

Here's another representation of a balanced scorecard. So, financial issues, create multiple revenue streams. For example, how do you create multiple revenue streams? If you're not selling on the internet, you can create an internet store, so that'll generate new revenue streams for you so that you're not totally dependent on the brick and mortar operation; you have some money coming from the internet as well. Everything is flowing from strategy. What do you want to achieve?







## Balanced Score Card (Graphical Representation III)



### ACME Retail Company Inc.

	Strategy			
	Objectives	Measures	Targets	Initiatives
Financial	Increase Gross Margin	Increase in \$ Profit	45%	Decrease Markdowns
Customer	Reduce Customer Complaints	# of Complaints	Decrease by 20%	Add More Value
Internal Business Processes	Better Hiring	Performance and Retention	Increase Retention by 6 Months	Develop a Profile
Learning & Growth	Conduct Customer Service Training	# of Complaints	Decrease by 50%	Acquire a Training Program



#### SLIDE 50:

This is yet another representation. These are all different representations of the same thing. Financial objective: increase gross margin. What am I going to measure? I'm going to measure the dollar increase in profit. Target: 45%. Right now I'm doing 40% I want to move to 45%. Targets are always higher, or better than, what we are doing today.





## Why Use Balanced Scorecards



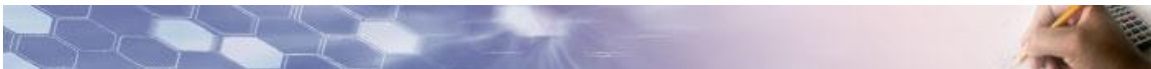
- To translate strategy into action
- Communicate strategy to staff
- Measure and report on KPI's
- Monitor progress



### SLIDE 51:

Once again, why use balanced scorecards? We want to translate strategy into action.

When you go out and say to people, "I want you to move from \$50 an hour to \$60 an hour. This is your target, and I'm going to measure it, and I'm going to monitor it, and I'm going to report it," they are going to take notice.





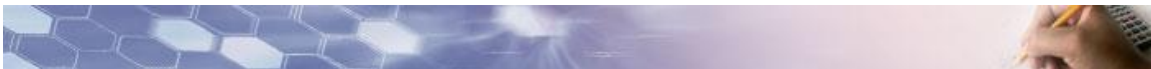
That is how you're communicating very clearly. There's no ifs, ands, buts. This is your target.

I am going to help you to achieve it.

If you need training I'm going to spend time training you, or I'm going to bring training programs in for you.

I'm going to do all sorts of things to help you. But the target is here, and I want you to achieve this within a certain timeframe.

So it's as clear as a bell. No ifs, buts, complaints, or whining. This is what we're here to do. This is business.





## How to Build Balanced Scorecards

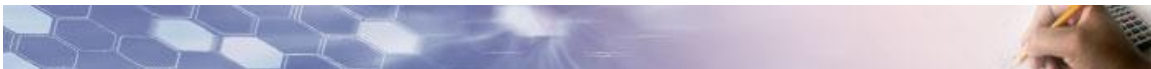


- Create goals and objectives
- Describe metrics around goals and objectives
- Assign target values
- Assign weights to each goal and objective
- Report the outcome



### SLIDE 52:

So you translated your strategy of increasing the sales into action, immediately. They got the message. That's one of the most beautiful uses of balanced scorecards. And then continuously measuring and reporting on KPI's.. and you're monitoring the progress.





## Balanced Scorecard step by step

- First, identify the most important KPI's based on your strategy.
- Create groups of KPI's that are similar in nature
- Assign goals (targets) and weights to each KPI within a group
- Assign weight to each group



### SLIDE 53:

We're just repeating ourselves here: create goals and objectives, describe metrics around goals and objectives, assign target values, assign weights to each goal and objective—we're going to talk about that.

So once you've decided on your KPI's - let's say you're looking at the financial picture. You said "sales" and you said "inventory turns". These are both financial perspective KPI's. Now, here's what you're going to do. "Sales right now... I'm doing \$50,000 a week.







I want to move that to \$60k." That's your new target. And now your turns, "right now I'm doing 3.5. I want to move it to 4." That's your new target, 4. And what you're going

to do (let's say you want to increase gross margin as well): Let's say you're doing 40% gross margin and you want it to be 45%.

So, you've set the targets. Now, the next level of prioritization—first priority was to choose issues and you chose sales, turns and GM percent out of probably 25-30 issues that we could come up with in terms of the financial perspective. But you said, "You know what? I just need to concentrate on these; I've got to fix these first before I go to others."

So, you did your prioritization right then. Now, the second prioritization you're going to do, you're going to say, "Okay, I have 3 KPI's here that I have to improve, and which one is more important? Is sales more important? Is inventory turns more important? Or is gross margin more important? Which one is more important?"

You're going to do another prioritization right here. You're going to say, "the most important thing right now is sales." And you're going to rate these out of ten. You're going to say "out of ten, sales is going to get a 5 in terms of importance.

Inventory turns are really important, but not as important as sales, so I'm going to give it a 3." And gross margin is left with 2. So this is the second layer of prioritization. You're saying, "these three are very important, that's why they're here in the Balanced Score Card, but out of the three, which one is more important, and we decided that Sales is 5, Inventory is 3, and Gross Margin is 2.

So, you do this, and then at the end of the period, you calculate, you look at your performance.





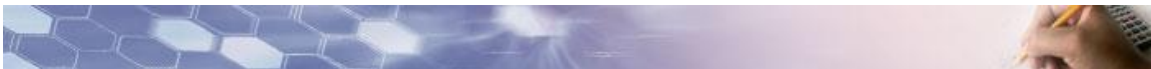
## Balanced Scorecards

### Example



#### SLIDE 54:

Here's an example to make it clear.





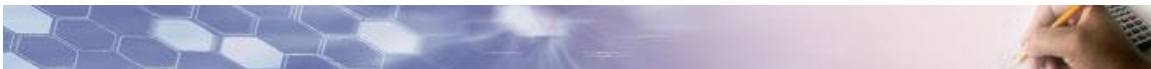
## Example

- Customer Related Goals of Your Store:
  - Fast checkout
  - Appropriate attention given to customer
  - Sell new arrivals to existing customers
  - Build loyalty



### SLIDE 55:

In this part I'm doing the customer perspective, and I've been thinking about my customers, what kind of service levels do we have, and this and that. And I decided "Our checkout is too slow. It's a big problem for me. I have to increase the speed at the checkout. I don't know yet how, but I'm going to figure it out. All I know is, I have to increase the speed of the checkout. That's one.





Another one, “I’m seeing sales people being too comfortable, too laid-back”. I want better attention given to the customer. I want them to be right on their feet when customer shows up, properly approaching the customer and giving proper attention to the customer. That will lead to more sales if they know what they’re talking about and

give the customer the proper attention. I’m saying, I want better attention paid to the customer and more sales are going to come to me.

And then we have a whole bunch of new merchandise arrivals. But they’re just sitting on the side. I want those new arrivals getting some attention. And that’s important especially for my existing customers because when they come back, they need to see something new. Otherwise, they get bored seeing the same displays, same merchandise.

And finally my fourth issue in customer perspective: I want to build more loyalty. Right now I have 70% repeat customers, and I want to move it up. I want to move it up as much as possible, but for this exercise, for this balanced scorecard, which I’m going to give 3 months to achieve all my targets, I’m going to have to choose the percentage. And, we’ll get to that.





## Description of Goals

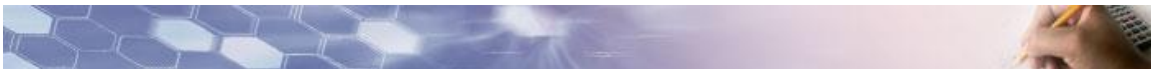
### Fast Checkout:

We want to make sure we are not wasting our customers time by prolonged checkout process.



### SLIDE 56:

Okay, a lot of these issues are self-explanatory, but if somebody wants an explanation, here's the explanation. At checkout, we want to make sure we are not wasting our customer's time by a prolonged checkout process.







## Description of Goals

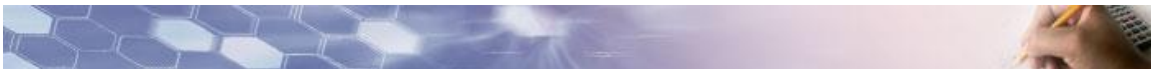
### Appropriate attention to the Customer:

It means each and every customer is helped and sold to, making sure that customers are looked after and maximizing our selling efficiency.



### SLIDE 57:

Appropriate attention means each and every customer is helped and sold to, making sure that customers are looked after and maximizing our selling efficiency. This is my definition if one of my staff asks "what do you mean by, appropriate attention for the customer?" This is what I mean.





## Description of Goals

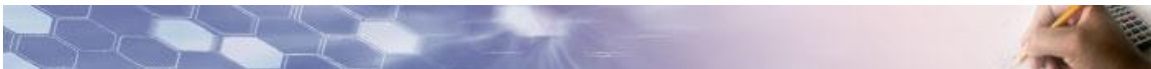
### Selling higher % of new arrivals:

This will keep customer experience fresh and also shows that salesforce is knowledgeable about new products.



### SLIDE 58:

Selling higher percent of new arrivals. Obviously, it's straightforward. We want to sell more new arrivals. But the thinking behind it is, "it will keep customer experience fresh, and also shows that salesforce is knowledgeable about new products."





## Description of Goals

### Loyalty:

We want to make sure we have more repeat customers, and we want to reward our loyal customers.



### SLIDE 59:

Loyalty, we want to make sure we have more repeat customers, and we want to reward our loyal customers.





## Metrics for the Example

- **Fast Checkout:** Measure the average time it takes to process a customer at the cash.
- **Attention:** Measure units per sale and average \$ per sale.
- **New Arrivals:** Measure the % of total sales in new arrivals.
- **Build Loyalty:** Measure % of customers that hold your loyalty card.

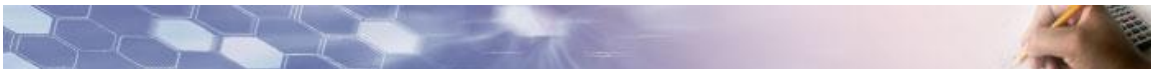


### SLIDE 60:

The next step is to come up with the metrics. I am going to measure the time it takes to check out a customer with a manual stop watch.

Average sale per customer and Average units per transaction are straight forward and POS will give you all the data you need to see how you are doing.

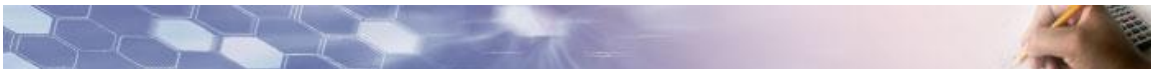
New arrivals is, again, easy to measure, right out of the POS sales report.





Build loyalty. I have a loyalty program so it's easy for me to measure the repeat customers because each repeat customer comes in with a loyalty card which I swipe and then I know they are a repeat customer.

Okay, those are the metrics that we are going to use, what are the targets?







## Target Values

- **Fast Checkout:** 2 minutes.
- **Attention:** UPT: 2, ASPC: \$75.
- **New Arrivals:** 40% of sales should be new merchandise.
- **Loyalty:** 80% of customers should have our loyalty cards.



### SLIDE 61:

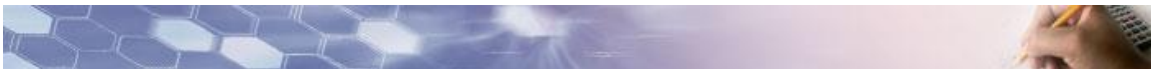
I've measured the check-out time and right now it's three minutes I want to reduce it down to two minutes so that is my new target.

UPT right now is 1.5.and I want to go to 2.

Average sales per customer is \$60 I want to go up to \$75.

For new arrivals I came up with an arbitrary target out of my head...and it is 40%. I want 40% of sales in new merchandise.

Loyalty: right now I have 70% loyal repeat customer ratio and I want to go up to 80%, because I can count on my repeat customers; that is my real





business, others will come and go but the repeat customer is the customer base that you can take to the bank.



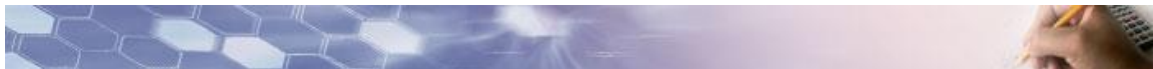
## Weighing Your Goals

➤ Fast Checkout:	1
➤ Attention:	4
➤ New Arrivals:	2
➤ Loyalty:	3



### SLIDE 62:

Now we are going to prioritize (out of ten) between these four issues, which one is the most important? I decided that attention given to the customer is the most important because it immediately affects my sales and immediately affects my customer satisfaction. I gave it **four** out of ten.





Second most important is loyalty because, as I said, I can bank on that existing customer base so I want a bigger existing customer base. I gave it **three** out of ten.

New arrivals I gave **two** and the checkout I gave **one**.

I have countless other customer related issues but I only count four because that is all I can concentrate on for this time frame. They are very important that is why they are here, but between themselves some of them are more important than others.

So this is your second layer of prioritization.

Obviously we are not just going to throw out the ideas and the targets and expect everything to happen without any effort.

No, we are going to go to work - the whole team is going to work to achieve the targets we've set so we are going to come up with promotional ideas, training requirements to train people, we are going to promote the ideas to the staff and we are going to do everything within our means to achieve these targets... and that is what we have done.





## Targets vs. Operating Results

- Fast Checkout: Target: 2 minutes.
- Operating Result: 2.5 minutes
- Attention: Target: UPT: 2, ASPC: \$75.
- Operating Result: UPT:3, ASPC: \$70
- New Arrivals: Target: 40% of sales
- Operating Result: 30% of Sales
- Loyalty: Target: 80% Has the Card
- Operating Result: 85% now has the card.

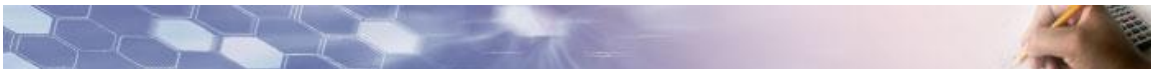


### SLIDE 63:

We watched and monitored, on a daily basis, what happened throughout the time frame we set out at the beginning, which was 3 months.

At the end of three months we tally up the results.

Operating results for fast checkout: target was two minutes and our operating results 2.5 minutes so we did pretty good – didn't quite make the target but we moved from 3 mins to 2.5 mins.





One of the benefits of this balanced scorecard is whatever management pays attention to is what staff pays attention to; everybody's eyes and brains are focused on making this thing happen, so everything is improving.

Operating results for Attention: We must have done a great job with UPT (in terms of training, motivating and incenting) we went way over target of 2, we achieved 3, which is 150%. ASPC did not come in as good, we achieved \$70 instead of target of \$75.

New arrivals were targeted at 40% and we achieved 30% and loyalty target was 80 and we over achieved at 85 percent because everyone started talking about our loyalty program and how great it is.(and maybe you came up with an idea that we should give five dollars for each customer who signs up for the loyalty card that they can use towards their purchase right there and then.)







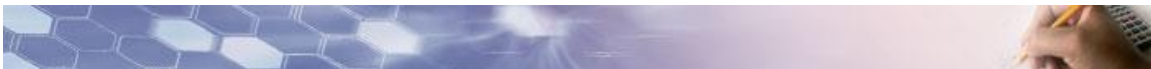
## Operating Results

Fast Checkout:	80.0%
Attention:	121.5%
New Arrivals:	75.0%
Loyalty:	106.0%



### SLIDE 64:

Here we are calculating the % achievement for each KPI: This is done by dividing the actual by target when we are looking for an increase and reverse if target in fact involves reduction (like expenses for example).





## Weighted Average Calculation

- Fast Checkout:  $80.0\% \times 1 = 80$
- Attention:  $121.5\% \times 4 = 486$
- New Arrivals:  $75.0\% \times 2 = 150$
- Loyalty:  $106.0\% \times 3 = 318$
  
- Total =  $1034 / 10 = 103.4 \%$



### SLIDE 65:

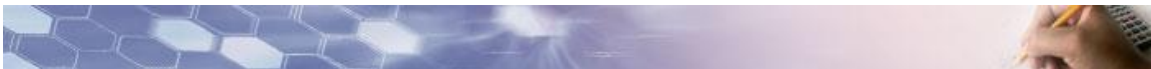
Next we are going to take weighted average - that is why we prioritized each issue in terms of their importance.

The checkout number gets multiplied by one, which was its weight, so the answer is 80.

Attention gets four times 121.5 or 486.

New merchandise sales came in at 75% which is to be multiplied by 2 to give us 150 and the final KPI, which was Loyalty – got 85% achievement and that gets multiplied by 3 to give us 255.

So, to get the weighted average we add all these numbers up and divide by 10. That comes out to be 103.4%.





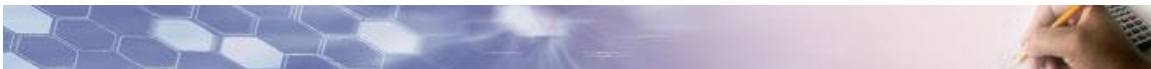
## Customer Perspective Score

- 103.4%, which means SUCCESS! We have exceeded our over-all target.
- Now you can do a similar exercise for other perspectives to come up with an over-all Balanced Score Card Results.



### SLIDE 66:

Overall, we are over achieving although a couple of areas were not really all that great.





## Performance Scores for All

- Customer Perspective: 103.5%
- Financial Perspective: 95.0%
- Internal Processes Perspective: 90.0%
- Learning & Growth Perspective: 110.5%

### Weights for each perspective:

- Customer: 3
- Financial: 3
- Internal Process: 2
- Learning & Growth: 2



### SLIDE 67:

Now the final thing you are going to do is go through the same process for each perspective and you are going to come out with numbers for each area.

So the final prioritization takes place at this point. You said, "okay I have four perspectives and they are all important but which one is even more important than the others?"

This prioritization is like a cleansing process. Each time you go through the prioritization you think hard about what is most important and this process will be very powerful for you.







## Final Balanced Score Card Number

Customer:	$103.5 \times 3 = 310.5$
Financial:	$95.0 \times 3 = 285.0$
Internal Process:	$90.0 \times 2 = 180.0$
Learning & Growth:	$110.5 \times 2 = 221.0$
Total:	996.5

Final Score:  $996.5/10 = 99.65\%$



### SLIDE 68:

Then you have your final balanced scorecard number. Remember, I said we were going to run the whole show by one number- that one number is 99.65% in this case - not good enough because, obviously, anything under one hundred percent is unacceptable - so we have to work a little bit harder and we see that we are not doing all that great in financial, obviously.

Then, you go back and drill down and see where the problems are.

You can now stop looking at the areas you are doing well in.



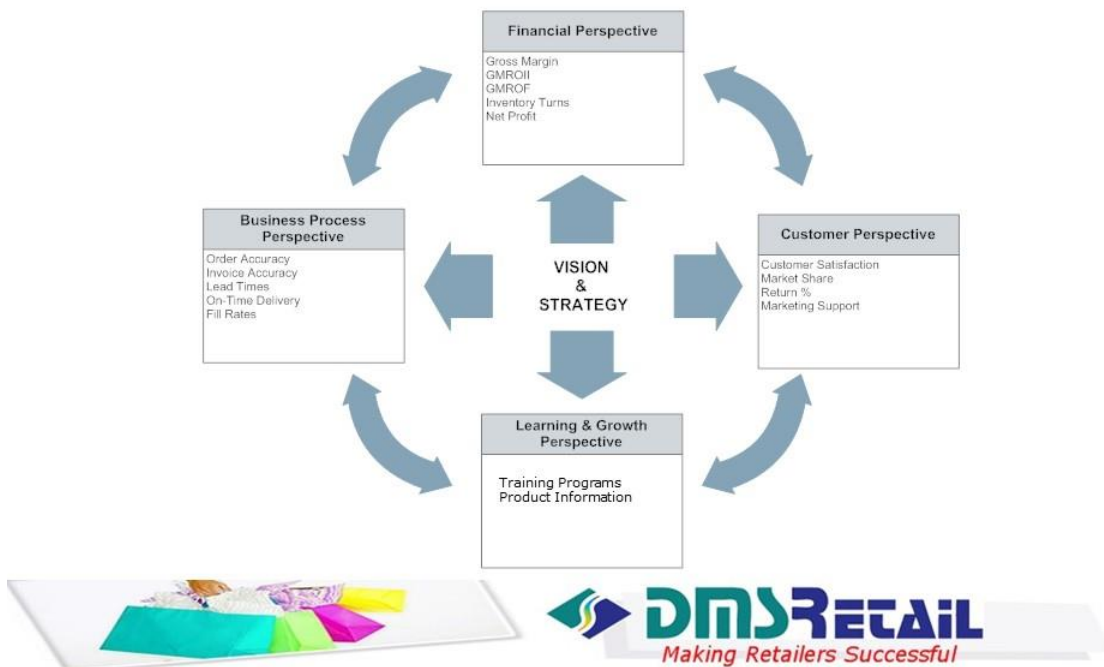




Deal with the problem areas. That is what the balanced scorecard is all about.



## Supplier Scorecard



### SLIDE 69:

This is a sample Supplier Balanced Scorecard. You can customize it based on your issues, challenges and priorities.





## Website Metrics & Measurements:

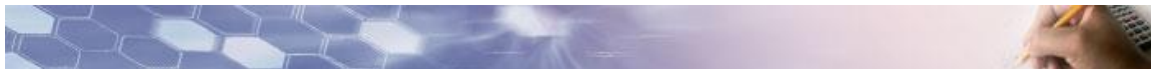
### Introduction

They say that ‘that which is measured, grows’. If you are not measuring the progress of your website growth, then there is no way for you to apply the scientific methods to ensure that it *continues* on an upward trajectory.

Without measuring, you have no way of knowing what’s working and what isn’t and you are essentially flying blind!

But what precisely should you be measuring? What are the most important metrics?

And how do these numbers work together to provide a detailed understanding of your traffic and your success? We will attempt to answer all those questions and more by focusing on the 8 most important metrics you need to be tracking!





## 1. Track Visits

The first thing to look at is the number of visits you are getting to your website.

This metric in itself is not necessarily all that useful, seeing as it **doesn't necessarily provide much information regarding the type of person visiting your site, the way they're engaging with your content or anything else.**

**Most websites will not see a visit as the 'end goal'.** If you are intending on building brand awareness, engagement and following, then you will need to reduce your bounce rate (see below).

**If you are trying to make money, then your 'goal' will be to increase your Ad revenue, or to make more sales of your products.**

You need to know your visits in order to make sense of all the other **data that you're getting.**

You need to know your visits so that you can know what *percentage* of those visitors are buying from you and thereby calculate your conversion rate.

How to Increase Your Visits





There are numerous different ways to increase page views and basically the answer here is: marketing. These days, that can include:

- SEO
- Social media marketing
- Content Marketing
- Advertising

The key is to create a synergy between all these things and have a strong brand that drives through all of them.

## 2. Bounce Rate

Your bounce rate tells you what proportion of your traffic lands on your site and then immediately leaves.

This is a good example of why visits don't tell the whole story. If you have 1,000 daily visits with a 99% bounce rate, then that means that only 10 people are actually sticking around to read your site!

But bear in mind that a bounce rate still doesn't tell the *whole* story. That's because a bounce rate isn't based on the amount of time they spend on your site but rather their interaction.

So someone might bounce from your site after spending a while there – and this simply means that they didn't click to read any of your other pages.

So even if you have a bounce rate at about 60%, that doesn't necessarily mean that visitors aren't reading your site – they may be reading the page but simply not feeling the need to read further.





A good bounce rate is generally thought to be anything from 26%-60% and you can consider anything under 30% to be very much in the 'outstanding' category.

Being around 40% is very average and shouldn't be a cause for concern. If you're about 55%, then you're getting into the higher portion but again, this is only a cause for concern depending on the type of site that you are running.

As a general rule, your bounce rate is arguably more important than your visits because it tells you about engagement and what percentage of your traffic is likely to come back, is likely to buy from you and is likely to become a 'fan'.

A similar metric to this is your 'average time on site'. This is similar to a bounce rate but can potentially be even *more* brutal, as it tells you how many of your visitors visited your site, spent a few seconds on your page and then left immediately!

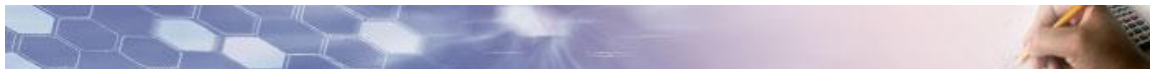
The thing to remember is that 55% of visitors will spend fewer than 15 seconds on your website regardless of the content.

## **How to Shrink Your Bounce Rates**

There are many different factors that play a role here. One such factor is the design of your website and as in real life, first-impressions are incredibly important!

If someone visits your website and they feel that it isn't particularly attractive or well designed, then this might be enough to cause them to immediately turn and leave!

The colors you use can have a big influence here and it's worth looking into things like color psychology.







Another very important thing to look at with regards to your bounce rates is your page load times.

### 3. Page Views and Average Page Views Per Visit

This basically tells you how many individual pages have been viewed, regardless of who viewed them or how many times. Thus, it might also be referred to as impressions.

It's also useful to consider aspects like your unique visits vs page views when you look at factors like conversion rates (below).

This is useful because each new page view can be considered a new chance for you to impress your visitors.

This metric is closely related to another very useful one: that being the average page views per visit. This is similar to your bounce rate but provides a little more in-depth data that shows you how many different pages your visitor looked around on your site.

This is a very useful thing to know because it can tell you whether you are being successful in getting your visitors to not only interact with your site but also to keep reading.

Another related metric/term that you should keep an eye on is your average cost per page view.

This is a metric that won't be readily available in most dashboards. But the thing to keep in mind is that most of the *most valuable* metrics in internet marketing aren't; you need to calculate them yourself!

To work this one out, all you need to do is take the average spend on your website and then divide it by the number of page views. Don't





forget to include all your other costs too in order to make this data as accurate as possible.

## How to Increase Your Page Views

Other than by marketing your site to increase visits, the other thing you need to do is to keep your visitors on your page and to keep them reading.

For example, WordPress plugins showing 'related posts' can be very helpful in this regard because they suggest similar content based on what the visitor is already enjoying.

Another useful strategy is to make multi-part articles. This is why you will often see posts split into lots of pages: it increases the page views and thereby increases the impressions for ads that you are earning from!

## 4. Track Referrers

Not all of the data you'll find in your Analytics or WordPress dashboards is going to be quantitative – some of it will be qualitative.

And the most important of that qualitative data is the referrer. Your referrer section shows you *where* your traffic is coming from.

This is very important for countless reasons. For starters, this lets you see which of your marketing efforts are paying off and which money is well spent.

Likewise, you can look at your referrers as a way to see what *kind* of person is coming to your site.





Pay careful attention to your referrers so that you can improve all the other metric and so that you can spot anomalies that could upset your data!

## 5. Track Conversion Rates

Your conversion rate tells you how many of your visitors are 'converting' in the way that you want them to.

In most cases, that is going to mean that they are buying a product from you – but it could also mean that they're signing up to a mailing list or even that they're clicking on an ad on your website.

This is the point at which your site has achieved its end goal.

Tracking conversion rates is incredibly important for the majority of online businesses because this is what is going to have the biggest impact on your 'bottom line'.

A lot of people believe that they need to focus on increasing their views and engagement but if you are looking at your website from a purely business perspective, then views and conversion rates together are really all that matter.

### How to Improve Your Conversion Rates

The great thing about your conversion rates is that you have full control over all of the factors influencing them.

When you're looking at your visits for example, this is partly going to be dictated by your search ranking.





While you can do everything you can do to improve your search ranking, the final decision ultimately lies with Google.

Your conversion rates might change inexplicably too and they might seem mysterious sometimes. But you still control all the factors – from your product, to the price, to the sales script, to the site design.

And that means you can keep tweaking until you get the precise result you're looking for.

### *Conversion Rates Vs Views*

A relatively new term in the world of marketing, sales and persuasion is something called 'pre-suasion'.

The general idea behind this term, is to get the customer *ready* to want to buy from you.

The argument is that people are much more likely to buy at certain times and especially if you have made the effort to get them in the mood for buying first.

People are more likely to buy in the evening for example because when we're tired, we become more impulsive and more emotional.

What's more though, is that people are more likely to buy from you when they have gotten to know your brand and when they are convinced that you know what you're talking about.

## **6. Rate of Return Visitors**





Rate of Return Visitors is another metric that will give you more insight regarding the actual engagement you're enjoying on your website.

As the name suggests, this will tell you how much of your traffic is generated by visitors who keep coming back to your site.

This metric is harder to track in a true manner because people will change computers and cookies over time.

Usually, a rough estimate is good enough for your purposes. The aim is just to get a rough percentage of how much of your traffic is new traffic.

And this is very important, seeing as it can tell you a lot about the nature of your visits.

For example, if you have a lot of visits, then you might think that this means you have a very successful marketing campaign. But then if you take a closer look and realise that the vast majority of those visits are from people who check your site once a week... suddenly you realize that your engagement is *great* but your marketing is not so hot.

## 7. CLV (Customer Lifetime Value)

This is the most important metric to track in terms of making money and it's another one you're going to have to calculate yourself by looking at a range of *other* metrics from your panel.

Customer Lifetime Value really measures the value of *all* your leads and visits. In other words, buying customers are worth X amount of money to you and visitors who never buy from you are worth 0. But if







you take the average amount, then you can work out a value for *each* visitor to your site, which we call CLV.

If you have 100 visitors, 1% conversion rates and a product worth \$100 (with 100% profit) then each visitor is worth \$1 to you, because statistically they are likely to earn you \$1.

What's more, is that you can then look at how many of those sales are *repeat* customers and factor this in to work out how many of your customers actually buy multiple times and are thus worth \$500 in reality.

To increase your customer lifetime value, you simply need to improve your conversion rates and your targeting.

What if you don't want to sell anything from your website? What if your aim is simply to build trust and gain a massive following?

Well in that case, you should *still* consider the CLV. This is still important because it is going to give you a budget for marketing your site and for promoting yourself.

## 8. CPA, CPL and ROI

CPA is the 'Cost Per Action' and this is a term that becomes relevant when you start paying for advertising.

'CPA' uses goal tracking to show you how much you are spending for each person to buy a product from you.

If you use Google Analytics and combine that with AdWords, then you can literally see how many of the clicks you get from your ad





campaign are resulting in sales and this in turn allows you to work out the average amount you pay for each new sale.

Meanwhile, a 'CPL' is a 'Cost Per Lead', which tells you how much you are paying for leads.

A lead will often be considered a warm lead who subscribes to your mailing list – but you could also choose to count highly engaged visitors as your warm leads.

To calculate a CPL in this way, you could look at your number of visitors and then compare this to the average page views per visit or the average time on site.

That way, you can work out the percentage of your visitors who end up being engaged visitors and therefore leads.

## **How to Improve CPA and CPL**

One way to improve your CPA and CPL is to target the right niche – one that isn't too competitive so that you can reduce the cost of advertising in that industry.

Another is to make sure that you have done everything you can to reduce your bounce rates, improve engagement and enhance conversion rates so that the people you are paying to bring to your site are *actually* likely to buy from you.





You can also do this by increasing the value of the product you sell, so that you improve the profit for each sale or by tweaking and improving your sales page to enhance conversions.

Another trick is to use advertising that charges on a CPA basis. Facebook now offers this service and allows you to set up CPA ads for things like page likes and even sales of special offers.

This way, you can agree to *only* pay when a click turns into a positive action – rather than wasting money on an ineffectual or poorly targeted campaign!

### **What to do With This Data**

All this work is going to help you to calculate how much you are spending on the types of leads and customers you are aiming to bring to your site and how much you are earning from them.

If you pay for 100 clicks and each costs you \$1 but you have a conversion rate of 1% and they pay \$200, then your customer is worth \$2 to you and you are only paying \$1.

If **some customers** tend to buy repeatedly, then your average value might be worth even more.

This then helps you to ensure that your final metric – your ROI – is high.

If your average customer is worth MORE to you than you are paying to bring them to your website, then you can rest assured that you will not lose money and you will continue to reliably bring in profit that will increase over time.





By working out your customer lifetime value, you can work out what your budget is for advertising spend and that way keep growing and scaling your business while minimizing risk.

Meanwhile, you can continue to improve your conversion rates and organic traffic in order to make more sales and allow yourself to spend more on those ads.

By tracking *all* of this data and looking at it in a synergistic and cohesive manner, you can predict exactly your earnings, you can identify where to invest your money and you can look at the failings that are damaging your profits and your engagement.

It takes time to get a handle on all this data but once you manage it, you can take the guesswork out of your internet marketing and turn it into a simple equation.

**And the answer to that equation = success.**





## Retail Analytics

### Better Retail Decisions Through Consumer and Store Data

In an industry notorious for expensive real estate, slim margins and tenuous customer loyalty, retailers in every category need as much support as they can get when deciding where to operate, what they should stock, which customers they should fight to retain, and how to communicate with them.

"Retail Analytics leverage data in retail processes to enable context-specific insight that is actionable."

### Customer Profiles

#### Who are my best customers and where do they live?

Adding demographic and behavioral data to the transaction record completes the picture; not only will the retailer know what customers are buying from them, but they will understand their lifestyles, particular life stage, their needs and wants, and what they are buying from competitors.

### Customer Profiling

A customer profile is a series of descriptive phrases that paint a picture of a selected retail consumer target. A good profile will answer the questions







**"Who are these people?"**

**and**

**"Where do they live?"**

A profile is built from demographic, expenditure, lifestyle and media preference data and is used to immediately understand the characteristics of a given customer.

Profiling is an effective tool because it helps retail marketers manage current customers, develop strategies aimed at specific prospects and reduce the overall costs of marketing and customer acquisition.

Using profiles to explore untapped markets is one of the most effective ways to increase retail direct marketing response rates and ultimately acquire new customers.

A good profile leverages known demographic, expenditure and behavioral characteristics against an unknown population and reveals similarities or differences you can exploit.

## **Segmentation**

Retail Marketers and analysts use segmentation to organize and manage market and customer data.

A segment is built by analyzing data and grouping (clustering) elements that share sought characteristics (in the case of retail, demographic, expenditure, lifestyle and media preference information).

Segmentation is essential for cost effective, accurately targeted direct marketing.





By organizing customer and market data in this way, organizations are able to understand the differences and similarities between groups of customers and prospects, and develop effective messaging, products and distribution channels appropriate to the specific needs and wants of a given segment.

### **Custom Segmentation:**

A retailer can get customized segmentation systems based on their specific requirements and circumstances.

A custom segmentation system blends client data with detailed consumer information databases to build actionable consumer and market intelligence, inform strategic messaging or positioning and refine targets.

Often a client will require a custom segmentation system to support a large, data-centric initiative or to organize and leverage underutilized data assets.

The study and use of comprehensive segmentation systems at the most granular level gives retailers a competitive advantage in the marketplace.

### **Predictive Segmentation**

Predictive segmentation embeds a predictive element into each of your segments, so not only do the consumers in each segment look and act alike today, they will look and act alike in the future. In this way, the predictive element helps to define the segment.

The key benefit to retail marketers is a tool that can be used today and in the future.





In addition, the predictive scores can be used independently to support tactical initiatives.

For example, if we are building a retention model we can add the predictive scores; this will allow us to see which customers show the greatest likelihood to attrite in the short and long term.

## **Targeting**

**How can I connect with prospects if I don't know where they live?**

Micromarketing data bases are produced each year and are available at several layers of geography-including Zip+4, postal code and postal walk.

Gathered into refined segments, these micro targets provide a wealth of actionable information about the households in each location-and can be quickly mailed to.

## **Creative**

**How do I communicate with customers and prospects I don't know?**

Quantitative information will help retailers understand their customer potential and qualitative intelligence will improve marketing, messaging and targeting strategies.

Combined, this intelligence offers retailers a data-driven strategy to increase profitability.





## **Sales Forecasting**

**How do I predict what my customers will be looking for in the future?**

Demographic and expenditure variables are ideal anchors for trend analysis.

Trend analysis uses historical data to make accurate predictions about future spending-in terms of amounts, categories, even brands.

## **Loyalty**

**My rewards program shows me what my customers are buying from me, but what else are they buying, and from where?**

Customer profile database will show retailers what their customers are spending across a variety of product, service and brand categories.

## **Customer Lifetime Value Prediction**

Sophisticated predictive analytics are used to help retailers build Lifetime Value (LTV).

Attrition and Retention scores for their customers, products or segments.

Strategic deployment of these results is proven to reduce churn and increase marketing ROI across the most profitable customer segments.





In mathematical terms, Lifetime Value calculates the present value of the profit realized on each customer for a given period of time.

It is important to note that "lifetime" does not designate a person's whole life, but rather the amount of time that he or she remains a customer.

In business terms, Lifetime Value modeling attempts to answer the question "What is the value of a given customer over time?"

LTV does this by building the holistic view of the customer that marketers can leverage to direct product development, service bundles and the creation of the optimal marketing strategy.

By synthesizing market information, transactional behavior, promotional history, time, money spent and attrition survival probabilities into a single metric, predictions can be made about the current dollar value of a customer or a segment as well as the expected value (either by client, portfolio, segment or location).

This holistic approach is the primary driver of Lifetime Value calculations.

### **Attrition and Retention Scoring**

Another important aspect of Lifetime Value modeling is the Attrition and Retention scores that can be built from the results.

These scores assist retailers in identifying the customers who are most likely to leave and join a competitor (attrition), when they are likely to leave and how much it will cost to keep them (retention).

In this way retailers can calculate ROI and develop strategies to retain the most valuable customer segments.







In addition, metrics like probability of attrition allows retailers to re-position resources and messaging to target the customer segments

with either the greatest possibility of attrition or the best return on a retention strategy.

### **Lifetime Value Modeling**

Just because a new customer makes a large purchase does not mean they are a profitable acquisition.

Lifetime Value modeling applies advanced algorithms to historical data to determine a customer's value over time, predict which customers are at risk of attrition, when they are likely to attrite and which customers threaten retailer's profitability.

Once a retail business understands the value of a particular customer for a specific period of time, they can proactively direct resources and strategy to support profitable Customer Relationship Management (CRM).

Lifetime Value modeling builds a single metric for customer, based on:



External Data







Transactional Behavior



Market Conditions





-  Promotional History
-  Time
-  Attrition / Survival Probabilities
-  Spending

## ROI

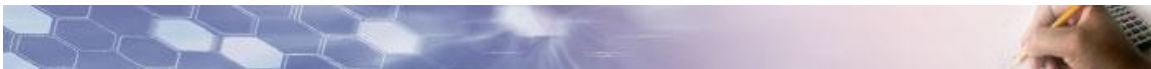
### **Is my marketing budget channeled for maximum return?**

Beyond demographics and expenditures retailers can add lifestyle, life stage and media preference information at the Zip+4 and the postal code level to build a complete view of their best customer.

## Increased Opportunity

### **The average number of items my customers purchase seems to be declining. What can I do about it?**

Market Basket Analysis tells retailers what products and services are most likely to be bought together. A retailer can then apply this information against customer profiles and generate Zip+4 and the postal code level pictures of consumer types who buy bundled products.





## **Retail Market Basket Analytics**

Retail Market Basket Analytics are used to analyze the relationships among items that a given consumer purchases (what they put in their "shopping basket").

This information is then combined with comprehensive consumer information databases and qualified predictions are made about what other items this particular type of consumer is most likely to purchase.

Retail Market Basket Analytics uses market, consumer expenditure and transactional data to determine what products are most frequently bought together.

It is a multi-channel tool, so it does not require that the consumer be physically shopping in your retail location; whether in person, through telephone, mail order or the internet; the transaction is the critical piece of information.

Retail Market Basket Analytics uses categorical and numerical variables. Did the consumer buy the product (yes/no)? And if so, how many did they buy? And how much money did they spend?

Retail Market Basket Analysis is not only trying to answer questions about which products sell together, but also which products are bought by the same types of people (segments).

This kind of intelligence supports a variety of strategic and tactical initiatives, such as:



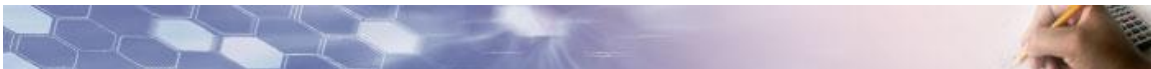


- ✓ Channel development
- ✓ Product / inventory mix
- ✓ Cooperative marketing
- ✓ New product development
- ✓ Media planning
- ✓ Shelf space allocation
- ✓ Store placement / layout

From a retail point of view (regardless of channel) Market Basket Analytics are powerful algorithms for determining the particular mix and placement of products; whether your focus is bricks and mortar retail location, the printed page of an annual catalogue or a page of the ecommerce site.

Retail Market Basket Analytics are highly predictive of consumer spending patterns.

When this information is appended to current year Zip+4 level demographic and behavioral information, retail marketers and product managers get a clear picture of current customers and prospects needs and wants, allowing them to anticipate opportunities and plan strategically for acquisition.





## **Price Elasticity Analysis**

To make effective decisions, businesses have to accurately predict market demand. Because demand is intrinsically connected to price, price elasticity is an essential computation for today's successful retail marketers.

Although price elasticity analysis is fairly common to marketing professionals, determining the optimal price point for maximum sales and profit is a complex calculation requiring economic, consumer (expenditure and historical) and market data, sophisticated algorithms and serious processing power.

Automatic analytics and proprietary predictive algorithms calculate accurate figures for an endless run of pricing scenarios, on both the supply and demand side.

Analytics of Supply calculates the volume increase necessary to offset any change in price. Retailers use this to measure and protect profitability.

Analytics of Demand calculates how much more product the market will need to satisfy the increased demand resulting from a percentage reduction in price.

Sophisticated pricing analytics help retailers make accurate predictions on how consumers will respond to different scenarios.

This information is used to develop competitive pricing strategies, fine tune sales forecasts and develop insights for purchasing, manufacturing, branding and communications.







## **Profitability**

### **What is the value of Trade Area Analysis?**

Formal trade area analysis calculates sales potential, market propensity and the probability of success of a variety of marketing and promotional activities.

Combined these three layers of information are a powerful set of analytical tools that winning retailers use to make more profitable business, real estate and marketing decisions.

### **Retail Location Selection & Market Potential through Predictive Analytics**

Increased competition and shrinking profit margins in the retail industry have necessitated a demand for sophisticated predictive analytics.

Organizations want to know what they can expect from a new or existing location over the long term, and what strategic investment is required to maintain a profitable market share.

Market Potential Analysis is used to forecast the potential sales for a location within a given trade area.

The forecast is based on the analysis of critical information, such as historic purchasing behavior, current market conditions, local demographics, consumer expenditures and competitive activity.

Retail Predictive Analytics can deliver a clear picture of who the ideal customers are and can show where to find more just like them.





Applying this technology help predict new opportunities, anticipate needs and proactively engage customers and prospects in winning CRM strategies that increase traffic, improve loyalty and drive sales.

### **Retail Predictive Analytics can determine:**

- ✓ Where to lease / buy property
- ✓ What products to carry
- ✓ What segments to target
- ✓ How to position different brands in the marketplace
- ✓ How a location will fare in the face of competitive threats
- ✓ Which areas to target with offers / advertising

Applying Retail Predictive Analytics to comprehensive supply side data delivers valuable business intelligence retailers and location analysts can leverage to manage the business of capturing and holding profitable customers and ultimately growing market share.

### **Utilizing Retail Predictive Analytics, retailers can optimize location selection based on:**

- ✓ Cost
- ✓ Revenue

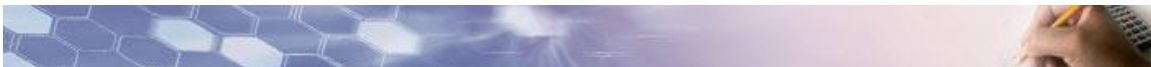




- ✓ Profitability
- ✓ Market Share

### **Employing Retail Predictive Analytics Retailers can:**

- ✓ Analyze the profitability of existing locations and predict the success of new locations and marketing mix scenarios.
- ✓ Build comprehensive customer segmentation systems for effective consumer targeting, marketing communications and branding.
- ✓ Analyze competitive activity, cannibalization and distribution channels
- ✓ Deliver data-driven demographic, expenditure and behavioral analytics to refine product mix and pricing strategies.
- ✓ Profile markets to maximize the effectiveness of media purchases, direct-mail response and cooperative as well as internet strategies.
- ✓ Deliver customer segments and profiles retail marketers can understand and quickly leverage.

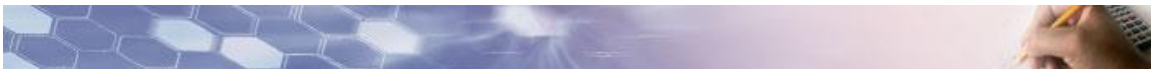




## Response Rates

### How can I put a lift in my Direct Marketing response rates?

Target different types of customers with different offers at Zip+4 and the postal code level. A geographically refined profile provides a wealth of expenditure, demographic, product and lifestyle information about a retailer's best customers and which Zip+4 or the postal codes they are concentrated in.





## Other DMSRetail Success Guides and Tools for Your Retail Management Success:

### **Managing for Higher Retail Success:**

<http://dmsretail.com/RetailSuccessGuides/managing-for-higher-retail-success/>

### **Winning at Store Management:**

<http://dmsretail.com/RetailSuccessGuides/winning-at-store-management/>

### **Retail Customer Experience Fundamentals:**

<http://dmsretail.com/RetailSuccessGuides/retail-customer-experience-fundamentals-2nd-edition/>

### **Store Manager's Organizer – Planner:**

<http://dmsretail.com/RetailSuccessGuides/organizer/>

### **Retail Employee Performance Evaluation System:**

<http://dmsretail.com/RetailSuccessGuides/i-succeed/>

### **22 Ways of Highly Successful Retail Managers:**

<http://dmsretail.com/RetailSuccessGuides/22-ways-of-highly-successful-retail-managers/>

### **Retailer's Guide to Emotional Hot Buttons:**

<http://dmsretail.com/RetailSuccessGuides/retailers-guide-to-emotional-hot-buttons/>

### **Retail Leadership Solution:**

<http://www.dmsretail.com/leadershipsolution.html>

### **33% Increase Formula:**

<http://www.dmsretail.com/IncreaseBlueprint.html>







**Retail Manager's Exclusive DVD Set:**

<http://dmsretail.com/RetailSuccessGuides/retail-managers-exclusive-dvd-collection/>

**Best Foot Forward Bundle:**

<http://dmsretail.com/RetailSuccessGuides/best-foot-forward-bundle/>

**Super Retail Success Bundle:**

<http://dmsretail.com/RetailSuccessGuides/super-retail-success-bundle/>

**Ultimate Retail Success Collection:**

<http://dmsretail.com/RetailManagementCourses/ultimate-collection/>

## Training Workshops & Self Study Programs

**Workshops:**

**Retail Sales/Operations Management Workshop:**

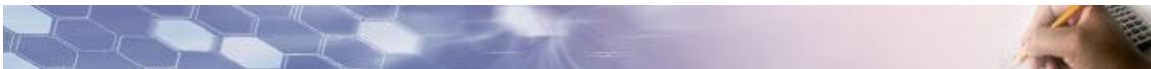
<http://dmsretail.com/RetailManagementWorkshops/retail-salesoperations-management-workshop/>

**Retail Category Management Workshop:**

<http://dmsretail.com/RetailManagementWorkshops/retail-bran-category-management-workshop/>

**Retail District Management Workshop:**

<http://dmsretail.com/RetailManagementWorkshops/retail-district-management-workshop/>





**Store Management for Maximum Success Workshop:**

<http://dmsretail.com/RetailManagementWorkshops/store-management-max-success-workshop/>

**Advanced Retail Math & Analytics Workshop:**

<http://dmsretail.com/RetailManagementWorkshops/retail-math-and-analytics-workshop/>

**Loss Prevention & Profit Protection Workshop:**

<http://dmsretail.com/RetailManagementWorkshops/retail-profit-protection-workshop/>

**Retail Design & Visual Merchandising Workshop:**

<http://dmsretail.com/RetailManagementWorkshops/retail-design-visual-merchandising-workshop/>

**Retail Standards, Benchmarks & Execution Seminar:**

<http://dmsretail.com/RetailManagementWorkshops/retail-standards-benchmarks-execution-seminar/>

**Self Study Courses:**

**Retail Operations Management *YourTime* Study Course:**

<http://dmsretail.com/RetailManagementCourses/operations-management/>

**Retail District Management *YourTime* Study Course:**

<http://dmsretail.com/RetailManagementCourses/district-management/>

**Store Management for Maximum Success *YourTime* Study Course:**

<http://dmsretail.com/RetailManagementCourses/store-management-success/>





**Retail Selling Skills & Customer Service Fundamentals *YourTime* Study Course:**

<http://dmsretail.com/RetailManagementCourses/sales-customer-skills/>

**Retail Brand & Category Management *YourTime* Study Course:**

<http://dmsretail.com/RetailManagementCourses/sales-customer-skills/>

**Online Marketing for Retailers:**

<http://dmsretail.com/RetailSuccessGuides/retailers-guide-to-online-marketing/>

