

# White Paper - Improving Business Performance Using Retail KPIs



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## About the Authors – Martec International

We help retailers, consumer goods manufacturers and their technology, logistics and other suppliers to grow their sales, market share and profitability, through a combination of our unique, industry specific training products, and performance support services.

We serve clients in nearly 60 countries.

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## 1. Introduction

Retailing is at first glance a fairly simple prospect – product is bought in bulk, presented to shoppers in smaller quantities, and then purchased by some of them. However, for a retailer to succeed over time they must continue to acquire desired merchandise and then offer it in convenient quantities at a price and location agreeable to the consumer. Now the simplicity vanishes and is replaced by increasingly complex issues that often require well-designed processes and sophisticated analysis of certain Key Performance Indicators (KPIs) to prosper.

It's not as complicated for a small shop owner to understand their business and consumers' desires – the owner is frequently on the sales floor, talking with customers and learning by personal experience what the customer wants and what price they will pay. However, for modern retailers with multiple stores (often spread over a wide geographic area), it is no longer possible for the owner to be as hands-on as a single store merchant. With size comes staffing. Specialists are now needed to help procure merchandise, manage the money, and run the stores.

The larger the retailer, the more complex the business becomes to manage. Marketing, buying and merchandising decisions are no longer made by store line personnel. Distance grows between these decision makers and the end consumer. Store management focuses on running the stores and becomes less involved in procurement. Effective gathering of data and analysis of a variety of KPIs is crucial for the retailer's success.

For retailers, understanding the importance and effective usage of KPIs is vital. This white paper will:

- Explore the common KPIs used today
- Define the formulae
- Discuss potential ways to improve them
- Explain their use in the routine management processes of the business.

For senior retail management, this paper will serve as a valuable reference to identify potential actions to improve KPIs whenever necessary.

## 2. The Most Common Retail Key Performance Indicators

At the basic level KPIs are used by management to track sales, inventory, profitability and productivity. Retailers, like all other businesses, need to measure and review their performance. Corporate, Buying Office and Store Management regularly use retail sales and inventory as measures of performance. Plus, most major purchases or changes are usually reviewed for their impact on the business in terms of sales, inventory, costs and contribution to profits.

In general, retailers use a number of core sales measures. The table below summarizes a large number of KPIs, some used by all retail departments, others specific to just one.

Key Performance Indicators				
Widely Used Through the Business	Store Operations	Buying and Merchandising	Finance	Marketing
<b>Sales</b> <ul style="list-style-type: none"> <li>Sales vs Last Year</li> <li>Sales vs Plan/Budget</li> <li>Same Store Sales</li> <li>Sales per Square Foot</li> <li>Sales per Linear Foot</li> </ul> <b>Inventory</b> <ul style="list-style-type: none"> <li>Inventory Turn</li> <li>Availability in Stock %</li> </ul> <b>Margins</b> <ul style="list-style-type: none"> <li>Gross Margin %</li> <li>Markdown %</li> </ul> <b>Profit</b> <ul style="list-style-type: none"> <li>Pre Tax Profit%</li> </ul>	<b>Sales</b> <ul style="list-style-type: none"> <li>Average Sale (Money)</li> <li>Average Sale (Items)</li> <li>Conversion Rate</li> <li>Transaction Count</li> <li>Traffic</li> </ul> <b>Inventory</b> <ul style="list-style-type: none"> <li>Shrinkage</li> <li>In-stock Availability%</li> </ul> <b>Margins</b> <ul style="list-style-type: none"> <li>Local Markdown%</li> </ul> <b>Labor</b> <ul style="list-style-type: none"> <li>Labor % Sales</li> <li>Sales per FTE</li> <li>Sales per Labor Hour</li> <li>GMROL</li> </ul>	<b>Sales</b> <ul style="list-style-type: none"> <li>Sell Through %</li> <li>Full Price Sell Through %</li> <li>Season Sell Through %</li> <li>Terminal Stock %</li> </ul> <b>Inventory</b> <ul style="list-style-type: none"> <li>GMROI</li> <li>Fresh Stock %</li> <li>Average Stock</li> <li>Weeks of Supply</li> <li>Inventory Density</li> </ul> <b>Margins</b> <ul style="list-style-type: none"> <li>Markup %</li> <li>GMROF</li> <li>Intake Margin</li> <li>Achieved Gross Margin</li> </ul>	<ul style="list-style-type: none"> <li>EBIT/EBITDA</li> <li>Return on Capital Employed</li> <li>Return on Net Assets</li> <li>Interest Cover</li> <li>Expense Lines % Sales</li> <li>Weighted Average Cost of Capital</li> <li>Net Cash Flow</li> </ul>	<ul style="list-style-type: none"> <li>Market Share</li> <li>Share of the Purse/Wallet</li> <li>Net Promoter Score</li> <li>ROMI</li> </ul>
		Supply Chain	E-Commerce	Human Resources
		<ul style="list-style-type: none"> <li>COGS % Sales</li> <li>Costs % to Budget</li> <li>Warehouse Efficiency Metrics</li> <li>Transport Efficiency Metrics</li> </ul>	<ul style="list-style-type: none"> <li>% Sales Online</li> <li>No. of Active Customers</li> <li>Average Order Value</li> <li>Average Order Items</li> <li>No. of Orders</li> <li>Site Traffic</li> </ul>	<ul style="list-style-type: none"> <li>Employee/ Associate Turnover or Churn</li> <li>Payroll % Sales</li> <li>Training cost per Associate</li> <li>Absentee %</li> </ul>

In this paper, we will review the most common KPIs grouped by category.

## 2.1 Sales KPIs

### **Sales Verses Plan and Last Year**

The first KPI any retailer looks at is sales compared to plan and last year. The comparison is usually done for sales this week verses the plan sales for this week and sales year to date verses plan sales year to date. Bearing in mind that expenses were planned based on an assumed level of sales, these KPIs show whether you are making enough sales to cover the expenses and leave a profit.

### **Like for Like, Same Store or Comp Store Sales**

The most important sales KPI is same store sales, also called like for like sales or comp store sales in the US. This is the sales this week or month versus the same period last year, or year to date verses year to date last year, only comparing stores open in both years. Hence this metric removes the impact of store openings and temporary or permanent closings. In general, same store sales of 3-5% show a business doing OK. Higher same store sales indicate very good performance.

When looking at same store sales figures, it is important to know the rate of inflation. Same store sales of 3% with inflation of 2% means that sales volume only grew 1%. Same store sales of 1% and inflation of 3% means that the retailer lost volume.

Same store sales are published periodically by the financial press; hence it makes it easy to do comparisons between competing businesses.

## Improving Sales KPIs

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### Building Retail Sales

Sales =

# People That Come In	X	% Who Buy	X	Size of Transaction
<b>Impact Traffic</b>		<b>Impact Conversion</b>		<b>Impact Basket Size</b>
<input type="checkbox"/> Frequency		<input type="checkbox"/> Optimized store layout		<input type="checkbox"/> Up-sell and cross-sell
<input type="checkbox"/> Primary and secondary shop		<input type="checkbox"/> Optimized price points		<input type="checkbox"/> Basket analysis to exploit product affinities
<input type="checkbox"/> Slow the churn		<input type="checkbox"/> Improved assortments		<input type="checkbox"/> Promotion design and execution
<input type="checkbox"/> Right promotions		<input type="checkbox"/> In stock		<input type="checkbox"/> Store layout to suit best customers – affinities and adjacencies
<input type="checkbox"/> Promotion design and execution				
<input type="checkbox"/> Identify secondary shoppers and promote				
<input type="checkbox"/> Retention analysis				
<input type="checkbox"/> Segment by lifestyle and recruit similar profile consumers				

There is an old but well-tried formula:

Sales = No. of people that come in x % that buy x average purchase size.

Apart from opening new stores, there are essentially three ways to grow sales:

- Get more people to come in the stores
  - Marketing – long term strategies and short-term promotions
  - Good service
  - In stock reputation
  - Value for money or quality reputation
  - etc
- Get a bigger percentage to buy something
  - Assortment planning
  - In stock management
  - Value for money pricing
  - Clear, logical displays and good visual merchandising
  - Customer service and selling skills training for staff
  - etc

- Increase the average transaction size
  - Display techniques
  - Use of basket analysis to exploit affinities and adjacencies

With the growth of online and omni-channel sales, it is also helpful to modify the formula above to:

$$\text{Sales} = \text{Traffic} \times \text{Conversion Rate} \times \text{Average Transaction Size} - \text{Returns}$$

Returns have grown significantly because of e-commerce sales being returned to stores and it is important to track this and react to the trend.

### Sales per Square Foot

Space is a valuable and costly asset. Retailers use a number of methods to help increase returns on their selling space. These are usually given in sales per square foot or gross profit per square foot. Retailers using racks or shelves may measure selling space returns by linear foot.

Sales per Square Foot is calculated as:

$$\frac{\text{Gross Sales } \pounds}{\text{Square Feet of Selling Space}}$$

There are 3 main ways that a retailer can improve returns on the total space their store(s) occupies:

#### 1. Allocate more space to selling

Stock rooms might be removed. An extra floor might, if possible, be added to the building, though sales per square foot typically fall away the further you get from the entry level floors (where customers make more impulse purchases).

#### 2. Sell more from the existing space

Planogram and space management techniques help to lay out a store to maximize sales - more space can be allocated to better selling lines. Related merchandise next to best sellers increases impulse buying, e.g. scarves with dresses or pasta sauces alongside pasta.

#### 3. Sell more profitable items

The aim is to maximize the profitability of the whole store, not just a particular department. A department may be achieving a high productivity ratio but failing to maximize sales. This may be because it is too small and can hold only a limited assortment. Or, a department might be too large for the profit it makes. Reducing space could give space for another, maybe more profitable department and improve the store's overall profitability.



The best store layout for maximizing selling space returns will vary throughout the year, so changes take place all year round. For example, the toy department will need to expand pre-Christmas, possibly at the expense of a household or furniture department.

Decisions based on selling space returns are usually made by the Merchants and the Store Operations department.

### Sales per Linear Foot

Many retailers measure the productivity of space on a sales per square foot basis. Sometimes it is more useful to measure profitability on a sales per linear foot basis. For instance, in food and drug retailers, where most merchandise is displayed on multiple shelves on long gondolas. Since the shelves have around the same depth, only the length, or linear dimension is relevant. Sales per Linear Foot is calculated as:

$$\frac{\text{Gross Sales } \pounds}{\text{Linear Feet of Selling Space}}$$

Advantages of linear feet for both suppliers and retailers are:

- They represent the space seen by the customer
- They are more meaningful for categories like food and cosmetics - food, because of the nature of supermarket gondolas and cosmetics because a lot of small products can be displayed in a small square footage.

Products that perform well usually do so consistently, whether linear, square or cubic feet measures are used. For example, cereals, coffee, sugar and commercial bread all rank among the top five edible products in sales using any of the three measures.

Most food and drug retailers use computerized space planogram systems to help them maximize the sales per linear foot of their stores.

If a category is well below average in sales per linear foot but well above in space it is given, it might show that category is getting too much space. In contrast, a category that is above average in dollars per linear feet and below average in shelf linear feet could be seriously understocked.

*In most countries, linear measurement is in meters rather than feet, and space is measured in square meters and cubic meters, rather than square feet and cubic feet.*

## 2.2 Inventory KPIs

### Stockturn

Stock (Inventory) Turn is the most usual measure of the efficiency of inventory control. It is the number of times within a period, usually one year, which the average inventory is sold.

Normally, higher stock turn rates are associated with products that sell at a lower gross margin percentage, for example, groceries. Conversely, a lower turn has to be associated with a higher margin; otherwise, the retailer will not stay in business. Department stores are an example of this lower turn, higher margin model. Grocers are the opposite.

Inventory turn is calculated based on the retailer's accounting method. Many retailers use the Retail Method of Accounting, otherwise known as the Retail Inventory Method. In this approach, inventory value is maintained and reported at retail or selling price and converted back to cost when the year end balance sheet is prepared.

Stockturn can be calculated as follows:

$$\text{Retail Method} \quad \text{Inventory turn} = \frac{\text{Sales}}{\text{Average Inventory at Retail}}$$

Department stores, fashion specialty stores and some mass merchandisers use the Retail Method of Accounting. In the retail method, all inventory, and related calculations, are measured at selling (retail) price until the annual financial statements are prepared.

$$\text{Cost Method} \quad \text{Inventory turn} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory at Cost}}$$

Other retailers, such as grocers and many hardline merchants, use the cost method of accounting. Newer companies especially tend to use cost, since the advent of computerized stock ledgers makes cost accounting much more feasible.

On the whole, the retail method requires less volume of data processing and was more practical before computers became the chief means of performing complex calculations involving the value of inventory at cost verses retail. In some countries, use of the retail method conveys tax advantages.

At its simplest, improving inventory turn involves increasing sales, reducing inventory, or a combination of both. However, few things are as simple as first seen. A retailer can boost sales, but will need to reduce, or control the amount of inventory needed to drive the sales. If the sales increase is matched by a similar growth in inventory, the desired result will not be achieved.

In the chart below two former leading US office supply companies are compared. The performance of Office Depot clearly shows that increasing turn can be done without hurting revenue growth. Five years after Office Depot embarked on a series of major supply chain initiatives, it did 2.4 times the sales on 1.4 times the inventory compared to OfficeMax. Comparable examples can be found in many retail segments.

	OfficeMax	Office Depot
Turn in 1995	3.0	3.1
Turn in 2000	3.4	7.2
Sales 2000	\$4,636m	\$11,154m
Inventory at Retail	\$884m	\$1,259m
Inventory at Cost	\$671m	\$922m

Other factors need to be considered when planning a desired turn level. Average turns vary by retail sector and should be used as a barometer when plans are made. It is possible to turn too fast. Excessive turn can result in lower customer service levels due to higher out of stocks for the consumer. Studies have shown that consumers confronted with continuous out of stocks will soon shop elsewhere.

Turning too slow can also damage a retailer by requiring extensive amounts of capital to finance bloated inventories. Slower turning products frequently require markdown funds to clear older, unwanted inventory. Excessive inventory investment has contributed to many retailers' demise. Too slow a turn also means that the store may not look fresh to the consumer, causing them to come back less often.

The following table based on a review of leading US retailers, shows the average turns by retail segment. Turns in the UK generally tend to be higher, partly because of geography and partly because UK retailers edit assortments or ranges more aggressively.

Retail Segment	Inventory Turn
Automotive Supply	2.50
Book Stores	2.15
Consumer Electronics	5.00
Convenience Stores	16.00
Department Stores	3.50
Drug Stores	5.40
Fashion Specialty	3.50
Home Décor	3.00
Home Improvement	4.00
Jewelry	1.30
Mass Merchandisers	4.50
Music/Entertainment	2.65
Off Price	4.30
Office Supplies	5.5
Pet Supply	6.67
Shoes	4.20
Sporting Goods / Leisure	2.60
Supermarket	10.00
Toys	2.00
Warehouse Club	10.00

### Availability/In Stock %

Availability or In Stock % is calculated as:

$$\frac{\text{Number of SKUs in Stock}}{\text{Number of SKUs Assorted for the Store}}$$

Availability has to be calculated by store and then a chain average computed. It can also be calculated for each warehouse or DC, which may be particularly important in respect of continuity products (items sold all year round).

Availability is usually calculated weekly, and it is essential to measure it at the same time each week. Measuring at Tuesday lunchtime might show the best position the business achieves all week. Measuring at close of business on Friday will tell you how your customers are likely to see the store on Saturday, most retailers' busiest day.

Availability for a grocery chain should be in the high nineties. For a fashion clothing business, 70% at store SKU level, would generally be regarded as excellent.

As a fairly good guide, every 1% increase in availability typically generates a 0.5% increase in same store sales. Hence improvements in availability can have a significant impact on sales and profitability.

## Fresh Stock Percent

In a fashion business, fresh stock percent is an important indicator. It shows how much newness the consumer will see in the stores every time he or she goes in. The calculation is:

$$\text{Fresh Stock Percent} = \frac{\text{Forecasted of Planned Receipts That Month}}{\text{Beginning of Month Inventory}}$$

Acceptable levels of “freshness” can be maintained by planning the phasing of receipts (especially new products, new styles or new colors) in the most appropriate way.

## Average Stock

Average stock is an important number as you can't calculate inventory turn accurately without it, because of retail's seasonal peaks and troughs. It is calculated as the sum of:

Opening stock in month 1  
Closing stock in month 1  
Closing stock in month 2  
Closing stock in month 3  
Closing stock in month 4  
Closing stock in month 5  
Closing stock in month 6  
Closing stock in month 7  
Closing stock in month 8  
Closing stock in month 9  
Closing stock in month 10  
Closing stock in month 11  
Closing stock in month 12

Divided by 13.

This calculation more accurately reflects the peaks and troughs within the year.

## Weeks of Sales (WOS)

Weeks of sales is a measure of how long current on hand inventories will last. There are two ways to calculate WOS, one is using the average rate of sale over the last N weeks and the other is using the average rate of sale in the forward sales forecast for the next N weeks.

Retailers with poor forecasting systems will often use the recent historic rate of sale, while companies with better systems will use the forward view. Best practice is to use the forward view as what matters is whether you will be understocked or overstocked going forward and whether you need to accelerate receipts somehow or start taking clearance action.

The calculation is the quantity of stock on hand divided by the historic or future average weekly sales for N weeks. In fast moving consumer goods sectors like grocery, the calculation could be done in days rather than weeks.

At higher levels of the merchandise hierarchy, the unit of measure would be money rather than units for both stock and sales, as belts would be completely different to canned beans, for example, and therefore non-comparable. At the item level, calculations would be done in units.

### **Inventory Density**

Inventory density is defined as the money value of the inventory divided by the selling square footage it occupies, including its share of walkway space. This is normally done at department or category level at chain, region or store level.

This metric is used to compare the ratio of sales per square foot to inventory per square foot for a department across all the stores in an area, sorted in descending order of sales. The comparison may also include the average ratio across the chain. Comparison of stores to the company average and across stores can show those performing really well and those not so well, to allow lessons to be learned and best practice to be spread more widely across the chain.

## **2.3 Gross Margin KPIs**

### **Gross Margin %**

Gross Margin (GM) is the lifeblood of a retailer. Simply defined, it is the difference between the net sales and the merchandise cost. Gross Margin Percent (GM%) is the further relationship of Gross Margin to Net Sales. The calculation is relatively straightforward:

$$\text{Gross Margin \%} = \frac{\text{Gross Margin}}{\text{Net Sales}} \times 100$$

While Gross Margin is important, a better indicator of performance is Gross Margin %. As sales are actualized, they may show significant variance from the plan. How many GM £ or \$ you realize will inevitably also vary from your plans. But, by using GM% you have a more accurate indicator of your performance on a week-to-week, monthly, or seasonal basis.

Gross Margin % may be calculated at an individual product level or at any level in the merchandise hierarchy. Gross Margin is eroded by markdowns and shortage (shrink). Depending on how a retailer does its accounting, it may be eroded by employee discounts. The critical issue about gross margins is that they must be big enough to cover the expenses of running the business and leave some over for profit. Over the longer term, they should ideally trend upwards, though many retailers are happy if they don't trend down.

Segment	US	EU
Convenience Stores	18%	20%
Department Stores	36%	40%
Home Improvement/DIY	28%	30%
Consumer Electricals	22%	32%
Fashion Specialty	45%	45%
Furniture (from stock)	43%	38%
Home Décor/Soft Furnishings	45%	37%
Mass Merchants/Hypermarkets	32%	35%
Supermarkets	27%	30%
Shoes	45%	45%
Warehouse Clubs	13%	13%

Planning your GM% is a vital part of understanding how to run a successful retail operation. With planned margins too high, customers may see you as overpriced and will look elsewhere to shop. Too low, and you may have trouble with cash flow and staying in business.

There are two important variants of gross margin, the initial margin and the achieved or maintained margin. The initial margin (also called intake margin) is the margin that exists when you bring the product into the business. The achieved or maintained margin is the margin that results after you have taken all the markdowns at the end of the season. It is the achieved margin that pays the expenses.

Retailers can impact GM% by either lowering cost of goods, reducing clearance markdowns or raising prices. Raising prices is easier but can be deadly to the consumer. Competitive pressures can make this option a major challenge for all but the luxury goods retailers.

Reducing clearance markdowns can be addressed by comparing sell through against plan and marking down earlier (the earlier the markdown is taken the less it usually costs), using store specific markdowns when the rate of sell through varies by store, improving demand planning and forecasting and improving buy quantities.

Lowering the cost of goods is not an easy task but may provide the retailer with a significant competitive advantage. There are four main ways of achieving this:

1. Improve sourcing, usually by sourcing from Asia, Africa, Eastern Europe, or Latin America where labor costs are very low.
2. Better or tougher negotiation with suppliers, which is an approach that can only be pushed so far.
3. Less use of display packaging which is becoming more feasible in a world becoming increasingly "green".
4. Use of supply chain management techniques to reduce the cost of getting the product from the factory gate into the store and smoothing peaks in shipping that generate avoidable cost increases.

## Markdown %

Markdowns are used as a tool to promote sales and reduce excessive stocks. The timing and size of markdowns are critical. Markdowns, like many performance figures, are expressed as a percentage of net sales. This allows performance comparisons between:

- Various types of merchandise
- Different stores in the company
- Other retailers

Markdowns vary a great deal depending on the type of merchandise and the conditions under which it is sold. In grocery, markdowns are normally less than 0.5% of net sales. In some apparel areas they can be as low as 5%, or as high as 50% of net sales. In general, clearance markdowns of 7% of sales (i.e. excluding promotions), would be regarded as respectable. Too low a markdown figure indicates that your buyers are not taking enough risk and too high a figure indicates mismanagement.

Markdowns may be used:

- As part of the normal product life cycle
- Because of depressed sales (for example, due to unseasonable weather)
- For planned promotional periods
- Because of late deliveries from suppliers
- To clear slow moving lines
- To meet competitive demands
- To clear fashion merchandise which has a very short shelf life
- As part of promotions subsidized by the manufacturer
- As part of a mechanism to free cash for further purchases
- To clear damaged merchandise



Although retailers should expect and plan for a certain level of markdowns, it is important to contain these reductions; they directly reduce gross margin and, therefore, profitability. Markdowns often are a necessary evil, they must be used to clear unwanted merchandise, but at the cost of profit. However, too few markdowns can leave a retailer with unwanted inventory at the expense of cash flow. By clearing unwanted merchandise, retailers are able to free up cash to purchase newer items and more of what is selling.

## GMROI

GMROI (gross margin return on inventory) is the ratio of gross margin to average stock on hand. It is a key performance measure for category or merchandise managers as it determines the investment in inventory needed to achieve a desired gross profit and so relates inventory turn to profitability. Simply put - it indicates the amount of Gross Margin earned for every pound invested in merchandise inventory. It can be calculated by a variety of means:

$$\text{GMROI} = \frac{\text{Gross Margin } \pounds}{\text{Average Stock at Cost } \pounds}$$

$$\text{OR} = \frac{\text{Net Sales}}{\text{Average Stock } \pounds} \times \frac{\text{Gross Margin } \pounds}{\text{Net Sales } \pounds}$$

$$\text{OR} = \text{"Stockturn"} \times \text{Gross Margin Ratio}$$

One way to think about GMROI is that it is the merchant's equivalent of the Finance Executive's Return on Capital Employed. ROCE is the pre-tax profit made for a given investment of capital, GMROI is the merchandise profit made for a given investment of inventory.

Whether you use retail or cost accounting, the divisor in this formula is always cost, because your inventory investment is always made at cost.

GMROI is a good way to compare a low margin, high turn category with a high margin, low turn category and see which contributes the best merchandise profits.

There are two main thrusts to improving GMROI, either increase the gross margin or reduce the average inventory necessary to achieve the required gross margin. Increasing gross margin has been addressed under the Gross Margin heading. Reducing the average inventory can be accomplished by, for example, speed sourcing methods that compress the length of the procurement cycle time or lead time, improved forecasting and tuning service level requirements, which both reduce the amount of safety stock required.

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### Gross Margin Return on Footage (GMROF)

GMROF is an important productivity measure of a retailer's use of selling space. It is defined as Gross Margin money divided by total selling square footage. In this calculation it is important to measure selling space rather than total space. Most retailers measure GMROF at store level, but it becomes even more valuable when measured at store department level, for example Gross Profits for Sporting Goods divided by Selling Square Feet allocated to Sporting Goods.

In this context, the gross margin number used should be the achieved or maintained margin.

## 2.4 Expenses Percent To Sales

There are four major components to a retail Profit and Loss (P&L) statement. These are sales, cost of goods, expenses and interest charges. Hence there are four major ways to improve profitability – grow sales, reduce cost of goods, reduce expenses or reduce interest charges.

Reducing or containing expenses is vital. Expenses are tracked and reported as a percent to sales. The calculation is:

$$\text{Expenses \%} = \frac{\text{Total Non-Merchandise Expenses (excluding interest)}}{\text{Net Sales £}} \times 100$$

Expenses generally run between 20% and 45% of sales, depending on retail format. (Warehouse clubs are much lower). There are three important views to track:

- Expense percent to sales verses plan or budget (see below).
- Expense percent to sales verses last year.
- Expense percent to sales verses competitors.

The first two should be measured and monitored weekly. In the case of the first one, comparisons should be made between this week this year and the same week last year, and then year to date this year verses year to date last year. For the second, the comparison should be this week verses plan for this week and this year verses plan for this year.

The third bullet can only be reviewed half yearly or annually. Annual reports (or half yearly statements) should be obtained for public companies in the same retail segment and their expense percent to sales calculated. This can then be compared with your company's figure to yield valuable information.

When making the comparison, it is important to remember that higher service operations have a higher expense percent as service costs more, so the right companies should be selected for comparison.

Having looked at total expenses, it is important to repeat the exercise for each line item in the P&L. For example, store labor is the biggest expense item for all retailers and ranges between 8% and 16% of sales. Four main categories of expenses – staff, space (or occupancy), marketing and distribution account for the lion's share of all expenses.

The items listed above should be calculated as a percent to sales with comparisons done as follows:

- This week verses this week last year.
- Year to date verses year to date last year.
- This week verses plan this week.
- This year verses plan this year.
- The weekly, monthly or seasonal trend in percent to sales

In the US, it will generally not be possible to compare this level of detail with other retailers, as public companies do not publish their results at this level of detail. In the UK, it is possible to compare staff percent to sales as staff costs are commonly reported in financial statements.

Smaller retailers can sometimes economically sustain a higher staff cost percent to sales (and give better service than big chains) because they don't carry the headquarters overhead that big chains carry.

Since labor is the biggest single expense, a good practice is to allocate stores a standard labor hours budget for each week, based on the sales plan, then allow a number of extra hours for each £1,000 of sales in excess of plan. This is sometimes referred to as a flex-budget.

## 2.5 Financial KPIs

### Profitability Percent

Profitability is measured as net profit before tax expressed as a percent to sales.

Profitability varies dramatically by country. However, with globalization and internationalized retail businesses, financial models in the various countries are getting closer to each other.

Best practice is to track profit before tax on a monthly basis and take rapid action when it falls below plan.

### Return on Capital Employed

Return on Capital Employed (ROCE) is defined as:

$$\text{ROCE} = \frac{\text{Pre-tax Profit}}{\text{Capital Invested In The Business}} \times 100$$

Retailers make widely varying returns but as a sweeping generalization, a business should be making at least 16% to be considered a successful business. A good analogy is to consider that you could invest \$100 in a retail business, or you could put it in a savings institution. In a savings institution you might currently earn 3% to 8% depending on investment, country and the prevailing level of inflation. To invest that money in a retail business carries a higher level of risk and should therefore, earn a higher level of reward.

The capital is invested in fixed assets and current assets or working capital. Fixed assets include buildings, fixtures and fittings, trucks, refrigeration units, etc. From a management perspective, the most important thing to focus on is productivity or yield of the assets, which is measured by things like sales and gross profit per square foot, cube utilization of warehouses and trucks, etc.

In retail, the biggest part of working capital is usually inventory. Accounts payable is another component, as is accounts receivable, which for most retailers is the balances outstanding on credit and debit cards that haven't been settled yet.

A variant on this measure is Return on Net Assets. This measures the pre-tax profit divided by the net asset value expressed as a percentage. For the purposes of this paper, they lead you to the same conclusions.

To improve the performance of your business, you can improve pre-tax profit, or reduce the capital employed to achieve the same profit or do a mixture of the two.

Improving pre-tax profit requires some mix of:

- Growing sales.
- Increasing gross margin percent.
- Reducing expenses as a percent to sales.
- Reducing interest costs, mostly by running the business on less inventory, but also by stretching supplier payment terms where possible.

Reducing the level of capital employed to make a given profit involves:

- Squeezing more productivity out of fixed assets such as selling space and fixtures.
- Reducing the inventory investment necessary.
- Collecting settlement faster from the credit card companies and banks.

### Return On Net Assets

Most people use the term assets to refer to tangible assets such as buildings, fixtures and fittings, trucks, inventory, and computers. With the exception of inventory, these assets appear on the Finance Department's fixed asset register and their value is recorded in the balance sheet. Inventory is also recorded in the balance sheet but normally appears in a stock ledger.

One of the goals of corporate management is to maximize use of assets and the Return on Net Assets (RONA).

$$\text{Net Assets} = \text{Fixed Assets} + \text{Current Assets} - \text{Liabilities}$$

The main ways to improve RONA are:

- Increase the pre-tax profit (through growing sales, reducing the cost of goods sold and reducing expenses).
- Reduce the investment in fixed assets needed to support the business (principal strategies to do this are to improve warehouse and selling space productivity).
  - Reduce the investment in current assets by improving inventory management (especially turns), maximizing cash flow and minimizing unprofitable receivables.
  - Increasing the credit taken on accounts payable without suffering worse terms.

### Acid Test or Quick Ratio

The Acid Test Ratio measures cash flow and can be used to gauge risk in a retailer's cash management. It is calculated by dividing all current assets (with the exception of inventory) by current liabilities. Inventory is excluded on the basis that it is the least liquid current asset. A relatively high quick ratio indicates conservative management and the ability to satisfy short-term obligations.

It is calculated as shown below:

$$\text{Acid Test Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

### Gearing

Gearing measures the proportion of capital used to finance a business that is borrowed and is a measure of the risk a business faces. If trading deteriorates and profits drop, the borrowing still incurs interest charges that have to be paid with less income to cover them. Hence companies with a high gearing are higher risk. The calculation is:

$$\text{Gearing Ratio} = \frac{\text{Loan Capital}}{\text{Capital Employed}}$$

### Net Cash Flow

At the trading level retailers are generally cash positive businesses. This is because if you pay your suppliers on 60 days terms and turn your inventory 6 times a year, you do not need borrowed money to finance your operations. If you turn your inventory 4 times a year and pay on 90 days, the same applies. If you pay your suppliers faster than you turn your inventory, you need a higher gross margin so you can fund some level of borrowings. This pattern is unique to retail and is a major reason why private equity companies invest in retailers. They can raise a lot of the money from financial sources and use the retailer's cash flow to pay the interest on the debt, as long as things progress normally.

Hence retailers report their net change in cash every year and investors look to see an increase.

When planning investments, the costs may reduce net cash in the short term, but the return-on-investment analysis must indicate an overall increase in cash over the life of the project.

### EBIT/EBITDA

EBIT is Earnings Before Interest and Tax. EBITDA is Earnings before Interest, Tax and Depreciation. Effectively, they are profit before tax and before interest and depreciation are included. Private equity companies often report EBIT for retailers they own, rather than pre-tax profit, because EBIT more accurately states the trading performance of the business, as the interest element is heavily distorted by the cost of the borrowings to finance a retail acquisition. In this sense, EBIT gives a more year to year comparison of trading performance and the size of the EBIT gives an indication of how well the retailer can service the debt.

## 3. Using KPI Data In Managing The Business

### 3.1 Budgeting and Financial Planning

It is important to have a well thought out budget or plan for the current fiscal year.

Most large retailers have a series of financial plans. These include a three or five-year plan, and annual and seasonal plans. Naturally, the forecast accuracy increases as the time horizon gets closer in.

The three- or five-year plans are used to set expectations on market expansion, profit margins, capital expenses and cash requirements. Retailers looking to grow their company make extensive use of this long-range planning.

Annual and seasonal plans involve more levels of detail and decreased margins of error. A main function of annual planning is to establish budgets for payroll, inventory, shortage, operations expenses, and other headings. Additionally, these financial plans are used as the basis for creation of lower level store and merchandise plans.

When developing financial budgets, it is extremely valuable to be able to examine the last two- or three-years financial performance at the detailed level and identify trends in, for example, gross margin %, staff costs percent to sales, occupancy costs percent to sales, etc. Once a plan is built, the resulting percent to sales figures should be compared to prior year results to check for sensibility. Good accounting software solutions can generally provide this capability.

### 3.2 Relationship with Merchandise and Open-To-Buy Plans

Financial budgeting results in setting a sales target for the company. Retailers then build merchandise plans that start to break out how those sales will be achieved. Often, the sales goal built into the merchandise plan will be higher than the sales budget. This gives some room to under achieve the merchandise plan (usually the highest risk area for retail profitability) and still make the financial plan. (Note: Expenses are geared to the financial plan not the merchandise plan).

Smarter financial management involves coordinating merchandise plans with financial plans. Merchandise plans include Open-To-Buy Plans.

Open-To-Buy (OTB) is a mechanism designed to direct and control spending by the buying and merchandising operation. It ensures that enough merchandise is bought to support the merchandise plan and that overspending is reduced. The OTB is a tactical tool updated weekly, or monthly depending on the retailer. In most cases, OTB plans are produced at department or class level, though they can be produced at all levels of the merchandise hierarchy.

Fashion and other retailers of seasonal merchandise, such as toy retailers, use Open-To-Buy extensively. Grocers and other retailers with a high proportion of continuity or year-round merchandise tend not to use Open-To-Buy techniques.

Open-To-Buy exists in two forms:

- The Open-To-Buy plan produced in advance of the season or year, as part of the merchandise planning process.
- An in-season or in-year control mechanism updated on a monthly or weekly basis. (Seasonal retailers tend to monitor OTB weekly, retailers selling less risky merchandise tend to do this monthly).

In the UK and mainland Europe weekly OTB plans are often referred to as WSSI – weekly sales and stock intake.

Retailers using the retail method of accounting will do most of the calculations at selling price. Retailers using cost accounting can convert sales at retail to sales at cost and then follow the same basic model using cost throughout.

Once a plan for a season is set and approved by senior management, the plan should not change within that season. Circumstances do change all the time however, so the right approach is to have a weekly in-season review process, almost always run on Monday mornings, which looks at the season results to date including last week, and re-forecast the rest of the season, based on the latest knowledge. The season forecast can then be compared with the original season plan and the variance between the two assessed. The variance analysis gives rise to three possible outcomes:

- Performance is on plan, hence there is no need to make changes.
- Sales performance is worse than plan, the department or company is now overstocked, and actions need to be identified to address the lack of sales and the buildup of excess stock.
- Sales performance is better than plan and stock will run out early leaving gaps on shelves. Actions will need to be identified to bring more stock in to maximize the sales potential.

### **3.3 Managing The Store At The Trading Statement Level**

Each store should be looked at as a complete business, with its own Profit and Loss (Trading) statement. However, not all items on a store P&L can be impacted by store management (for example depreciation). Hence, their trading statements should focus on variables they can manage, such as labor, maintenance, and of course sales. As in corporate reporting - these reports need to include this week, this week last year and plan, plus the same for season to date, to have a true comparison. Many retailers will show how one store compares to the average store in the chain or region as yet another comparative.



### 3.4 Vendor Management And Its Relationship To Cash Flow

Part of smarter financial management for many retailers is negotiating favorable payment terms. These terms can dramatically impact the cash flow for any size retailer.

There are two main issues when negotiating payment terms with vendors. One issue is when payment falls due, the second is to negotiate a tiered approach to payment. For example, if your secure payment terms of Net/30 – you would be expected to pay the balance in full 30 days from receipt of goods, with no interest penalties. However, many retailers can include other tiers of payment, with rebates for early payment, perhaps a 3% rebate if paid on delivery, or 1% if paid in 15 days, etc. Late payment terms can also be discussed – say, a 1% penalty for paying at 45 days, maybe 3% for payment at 75 days, and so on.

Why are terms so important? Take diapers, for example. Say a retailer sells on average 1000 units per month and negotiated payment terms are Net/30. If the retailer purchases 1000 units a month, and pays in 30 days, there is no financial carrying cost. Payment is made about the same time all the units are sold. If the retailer negotiates payment terms of Net/45, then they would have use of the cash for 15 days until required to send payment. The cash can be put on deposit and earn interest. While the interest earned may be a tiny percentage, it is free money. There is a school of thought in the US that many grocery retailers' entire profit derives from the interest they earn on the cash float. (US grocery retailers average about 1.4% pre-tax profit).

When running the accounts payable and determining what invoices to pay, it is important to review the cash on hand first and assess impending cash needs. If there is sufficient cash on hand all currently due invoices can be paid. If this leaves some cash that is surplus to immediate requirements, it is often wise to review paying some other invoices early. If the settlement terms are such that the interest you lose on the cash float is more than offset by the settlement discount you can take for early payment, then these invoices should be paid early. If there is insufficient cash on hand to meet all currently due invoices, then those invoices delayed for payment should be the ones with the least penalties negotiated when the terms were established. This flexibility can be so important that some organizations base part of their buyers' bonus on improvements they can negotiate to terms.

### 3.5 Monday Morning and End of Month Routines

Weekly and monthly performance reviews are essential to smart retailing.

Actionable reports eliminate content that requires little or no action on the part of the reviewer. For instance, weekly Best Seller reports are common for most larger retailers. But, what can a retailer do with this information? Attention must be drawn to potential lost sales, overstocks, excessive markdowns, etc. An actionable report could show the top 10 selling items with low on-hands and no on-order. Another could be slow selling styles with excessive on-hands and additional merchandise on-order.

For merchants, an actionable report could show weekly performance by department vs. plan – but only show those areas under-performing by a defined percentage. Another example would be to track vendor sales across departments and show only those vendors whose maintained margin is falling below agreed levels.

This type of report enables quick response and provides immediate focus on the key business issues. Speed of response is vital. It's a competitive advantage that smart retailers adopt.

### 3.6 Financial Danger Signs And How To Avoid Pitfalls

As discussed above, weekly and monthly analysis is important to review actual performance vs. planned expectations. The majority of retail sales occur on Thursday, Friday, Saturday and Sunday. Hence, weekly routines must focus on diagnosing weekly successes and failures on Monday morning and starting actions on Monday afternoon to get stock on wheels to stores to address the missed opportunities due to stock shortages caused by the past week's events. This way, a good chunk of replenishment will arrive by Wednesday to help maximize sales performance. Monthly routines focus more on trend related issues so that the overall season performance can be maximized. Thus monthly reports are heavily driven by regularly updated season outcome forecasts.

There are a variety of danger signs to watch for when reviewing performance, these include:

- Unplanned and continual decreases in same store sales performance.
- Decreasing gross and net margins vs. plan.
- Excessive markdown rates further eroding margins.
- Sustained overages in expense percents compared to plans. This could include:
  - Increases in labor costs – wages, benefits, unemployment insurance, etc.
  - Overspends in store maintenance budgets.
  - Poor sales per square foot, etc.
- Poor item sell-through rates vs. plan, leading to a build-up of aged inventory.
- Weaker sales vs. plan in stores facing a specific competitor.

Some general guidelines are:

- If desired sell throughs are not being achieved, take the markdown early. A 20% markdown early in the season may do a lot more to clear the goods than a 50% markdown in the end of season sale.
- Consider developing an automated markdown recommendation model, which identifies under achieving products and generates markdown recommendations. This will protect against staff being too busy to detect all potential instances.
- When same store sales are declining, check that you have enough inventory on hand in the right categories. Then drill down to identify categories that are still growing and exploit those more.

## 4. Summary

The basic concepts of retail have not changed for hundreds of years, providing merchandise and services to consumers at a desired price. What has changed is the growing size and complexity of a modern retail business. KPIs are vital indicators of the health of a retail business and understanding what they represent and how to manipulate them can mean success or failure.

Speed and knowledge are key in today's market. Access to data, the right data is imperative to keep ahead of the competition. Knowing what to look for and how to get it can help your company thrive.

The major review points are:

- Every Monday morning – what worked last week, what didn't work, what do we need to fix quickly?
- Each month or period end – take a more comprehensive view of how the business did and what needs to be changed in terms of in-season execution
- The end of season review, also known as the After-Action review in the US. What lessons can we learn from last season that we should document and improve on for the next comparable season? What results from last season can help improve assumptions for the same season next time round?
- The formal review and plan approval process at the end of each planning cycle.

## APPENDIX

### How Do You Compare?

Use the table below to benchmark some core KPIs of your company against others in your sector. Gross margins are based on US numbers. EU numbers are included earlier in this white paper.

Segment	Gross Margin %	Pre-tax Profit % to Sales	Stockturn	Availability	Sales per Sq. Ft.
Convenience stores	18	2.0	22.0	95	600
Department stores	36	7.5	8.0	80	300
DIY	28	7.7	6.7	90	140
Consumer Electricals	22	4.0	7.5	90	550
Fashion specialty	45	9.5	10.0	60	350
Furniture (from stock)	43	6.0	11.0	85	200
Home décor / soft furnishings	45	6.5	6.5	80	200
Mass merchants / hypermarkets	32	5.5	12.5	92	400
Supermarkets	27	3.0	21.0	93	850