

Technology

Of all the factors influencing the retail world today, technology is having the most profound impact. Never before has any retailer been able to gain such a significant competitive advantage over another through technology.

Do You NEED TECHNOLOGY?

Yes!

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Technology will not save a bad retailer, nor will it run your business for you. A computer is only a tool; but used properly, it can dramatically improve your performance; used improperly, it can wipe you out. What the right computer and software can and will do is increase your customer service level by 50% to 100% or more and increase your profitability by 10-20% or more, if it is the right computer and you know how to use it.

With hundreds of computer programs to choose from, the challenge today is to know how to choose the right one. Here we are going to talk about how a computer program can help you, and the benefits you can expect from the right systems.

The days of huge sales increases and high gross margins are over. Competition has led to tighter margins and greater pressure on profits. Operating expenses, such as rent, payroll, utilities, supplies, etc. have been steadily increasing as gross margins have been steadily declining. The challenge of the future will be to increase the bottom line not from margin increases but from operating efficiency. In addition, substantial increases in full price business will be possible with the use of relationship marketing which is made possible by the use of a customer database.

Technology impacts retail in two different ways: the marketing side and the operating side. Often the two are so interrelated that it is impossible to separate them. Increased efficiencies in operating can lead to marketing advantages.

How can a computer help me do this?

There are probably hundreds of possible efficiencies from using a computer, from payroll to ticketing to purchase order printing. Here we will focus on the three areas offering the greatest opportunity for dramatic improvement in profitability: Sales, Inventory, and Mark-downs.

Fundamentally, retailing is a straightforward endeavor. If we have the right item, in the right place at the right time, in the right quantity, at the right price, and serve the customer properly, we will be successful. The difficulty comes in getting all the rights right.

Assume that your location is good, that you know how to merchandise your store and that you have a basic understanding of what your customers want. Now, how can a computer program help you?

Sales

Knowing what is selling *and* when *and* at what price will help you re-purchase those items that your customers tell you they want. **Customers Vote With Their Wallets!** Sales information at its size and color level lets you quickly replenish what you have sold. Sales information by price point tells you what your customer will spend within a classification. Sales by vendor tells you which vendors are performing. The more information you can capture at the point of sale, the more efficiently you can control your business.

Inventory

If you expect to get sales reports at a certain level (i.e., sales by item) you must track inventory at the same level. Unless you are selling fine wine, your inventory is a depreciating asset. This means it is worth less every day it remains in your store. Sam Walton, the late founder of the largest and most profitable retailer in the world, Wal-Mart once said "Any retailer that is not clearly focused on inventory turnover will not survive."

A good computer system can allow you to look at inventory on a daily basis; identify what items are not selling and focus attention on problem areas; identify hot items and confirm that there is enough stock on hand and on order to meet the demand.

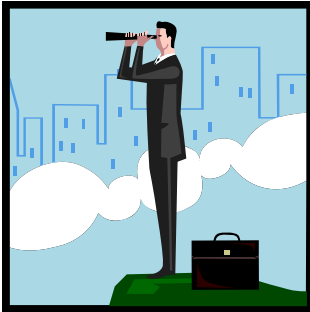
A good inventory system will also show where you are in serious need of replenishment. Some systems even automate this decision by suggesting replenishment quantities, generating an order and sending it via the internet to the vendor (EDI). Today, with the real cost of money being at an all time high, it is imperative to trim inventories and weed out the profit robbers that are taking up expensive space and not paying the rent. On \$100,000 inventory at cost, a 10% reduction of that inventory level will put a minimum of \$2,000 into the bottom line. This savings comes not only from interest expense savings, but also from reduced mark-downs.

Mark-Downs

Most retailers will make the greatest productivity gains by reducing mark-downs. While mark-downs are inevitable, there is an optimum mark-down level. Too few mark-downs tell you that you are not taking any risks in challenging your customers with new products. The opposite extreme is too many mark-downs. Mark-downs should be viewed as **tuition that you pay for an education about your customers**, an education that is only possible if you study what is being marked-down and why.

A good computer system will allow you to analyze mark-downs by size, color, style, original price, vendor and age and give you valuable information for your next purchases. Good mark-down information allows you to tailor your inventory to what the customer is willing to pay full price for.

Relationship Marketing (how technology grows sales)



Back to the Future

A good computer system will also contain a customer database program that will allow you to identify which customers purchased what items. These systems tie every SKU to a customer's name and allow powerful queries/questions to be performed, for example, the lost customer query.

Ask your database on a monthly basis to produce a list of all customers who spent more than \$500, or any other amount, in the past year, who shopped in your store more than six times and who have not shopped in the past three months. This list contains potential lost customers who are drifting away. A nice letter and a \$25 gift certificate can help get them back.

A customer database can be used in limitless ways. For example, list all customers who purchased a certain type of product, and send them an offering on a related item. Or send your 100 best gross margin customers a nice gift at Christmas; or send your lowest 50 gross margin customers a pre-clearance sale notice as you know that sale merchandise appeals to them.

The best computer systems are integrated – in other words, all the software programs talk to each other and share information. The point of sale system gives information to the inventory system, which also gives information to the financial and customer database system. This integration allows all information to be available for all kinds of analysis.

The efficiencies in the three areas and sales increases from relationship marketing are just the beginning. A good system will also help control expenses and increase productivity in every area of your business.

Technology, Operations, and Marketing

Today's bar code scanning technology gives you the ability to capture sales information quickly and accurately; and at the same time speeds customer check outs and reduces the need for additional staff at the register.

Today's standard is the Universal Product Code/UPC, a combination of the supplier identifying number and the product identification number. The first five numbers are assigned to a unique supplier, and the second five numbers

are assigned to the particular item. A laser or CCD scanner reads the codes and matches the information with a Price-Look-Up/PLU file in the register and assigns the current selling price and description of the item and shows it on the screen. In many cases, the UPC technology has eliminated the problem of price tag switching and of sale prices continuing past the end-of-sale date.

UPC technology makes mark downs easier, as they can be entered in the PLU file and taken automatically at time of sale. It also provides valuable information as to when a customer buys a reduced item as well as at what price they bought it.

A drawback of UPC is that because it's relatively enduring, the item can lose its date code. The UPC code cannot perform an aged inventory unless a separate product label is coded to give the date information. Some retailers simply add a date code to a separate price ticket.

The real efficiency of UPC comes from not having to put a price ticket on the product itself, which can add handling cost to the product.

Technology can also track inventory movement within the store. Once the SKU is entered into the inventory system, the computer can monitor that item, report numerous factors and measures about it, and help a retailer maintain the balance of inventory to their customer demands with a minimum of intervention.

Automatic Reorder is another method by which the computer does most of the work. With Automatic Reorder the computer looks at the item's historical sales pattern, generally over 12 to 18 months, and calculates the daily demand based on this curve. It will also factor in last period sales to see if the item is trending up, holding even, or coming down from historical patterns. This sales forecast is then compared to the inventory on hand and on order; if necessary, the computer can produce the order and send it to the vendor.

Automatic Reorder is not for every item in a store, but works best with items that have a historical rate of sale. New items with no history cannot be trended but must be watched closely based on the retailer's knowledge of the market and gut feel.

Executive Information System/EIS

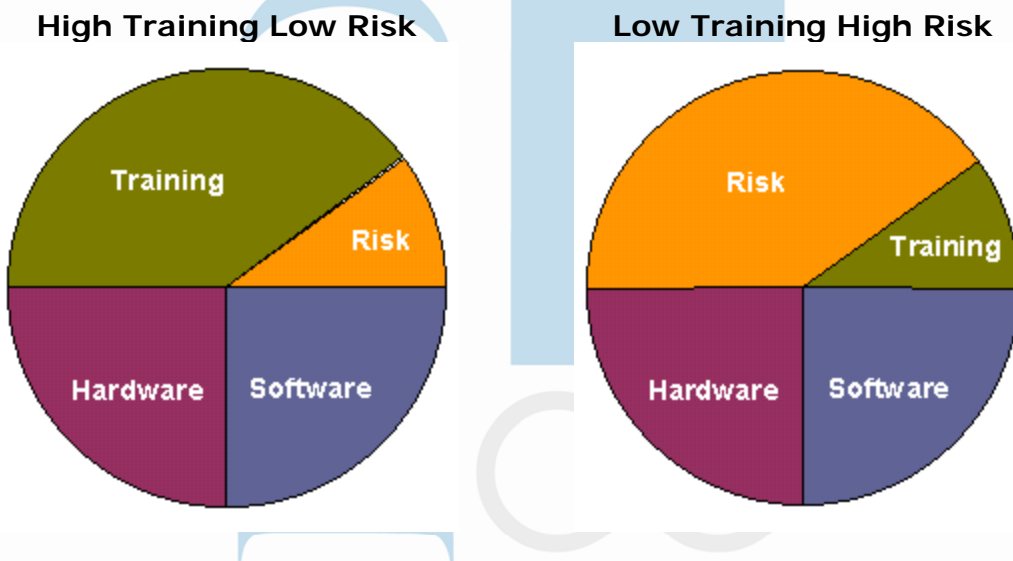
EIS is a software program that allows retail executives to look at key data and arrange it in any form they wish. For example, you could initially compare yesterday's sales to sales on the same day one year ago. If yesterday's sales are down, EIS will explode them to a look by store, to see if some stores or regions were down more than others. If you find a store that was down, you can drill down to its sales by department. If you find a department that's down, you can drill down to the classifications, then SKUs

in each class, and compare this year's inventory level to last year's - all of this is done in a matter of seconds.

Almost all EIS programs today are written to run in Microsoft Windows™. With the exception of POS almost all retailers today are using Windows™ as the desk top operating system, even using it with their main frame or mid range computers in what is called terminal emulation mode. This allows users to take program data and import it directly into their own applications for further analysis or reporting.

Learning to use the technology - TRAINING COSTS

Most retailers use only about 50% of their technology, mainly because they have not invested enough time in teaching the end user to actually use the systems. Because the cost of hardware and software is decreasing so rapidly, many retailers think that training costs are decreasing at the same rate. They are not. To get the full benefit of your hardware/software, training is mandatory!



PAY BACK

Don't buy technology just to have it. Technology must pay back either by saving expenses or increasing sales, and preferably both. Companies who invest wisely in technology are gaining a significant competitive advantage over their competitors who have not made this critical investment. Before investing in any technology ask the following questions:

Note: Provide an answer for each potential investment in technology equipment that you plan on making.

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Question	Answer
What is the existing method of performing the task?	
Is it right, or can it be improved?	
What technology can be brought to the process?	
What is the cost of the technology? Include purchase price, training, supplies and on going support	\$
What are the pay-backs to the technology? Quantify as much as possible, but don't over analyze for 36 months	\$

If pay-backs do not exceed cost over a three year horizon, then do not do it.

Technology and Strategy

How you deploy your technology must also relate to the strategic retail direction you have chosen. If you choose the Operational Excellence Strategy, you should focus the use of your technology on those areas that will give you the greatest return.

Type of Strategy	Focus of Technology
Operational Excellence	Efficiency, distribution, operating systems. Software is used to reduce operating overheads. Heavy use of distribution and receiving software as well as EDI with vendors. Tight integration of systems with vendors. Merchandise systems focus on turnover tracking, markdown projections and by store stock balancing and assortments.
Customer Intimacy	Data Base, customer tracking, POS speed. Software is used to enhance the customer experience. Customer preferences are tracked as well as customer data and purchase history. Individual mailing ability sorted by any factor is common. Prospect lists, thank you cards, newsletters, frequent shopper clubs and customer driven data is stored in relational database products allowing great flexibility of personalizing the message to the customer.

Product Leadership	EIS systems, Merchandise planning and tracking, product development. Software is used in assortment planning and refinement. Automatic reorder is used for basic replenishment and to assure in stock of basics. Product development software is used for internal private label development. Executive information systems are used extensively to analyze merchandise movement within an assortment.
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HOW MUCH SHOULD Your TECHNOLOGY COST?

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When considering an information system for your store, think of it in terms of investment. The advanced thinking retailer will spend from 2% – 5% of sales on information technology, systems and supplies. The useful life of most computer hardware is five years, and in the case of printers, about three to four. Software can have a much longer life, so use five as an average for the total system; i.e. depreciate it over five years.

The following calculation tells you how much you should budget for a retail system, including hardware, software and personnel.

<i>Example:</i>	
Annual Sales \$450,000.00 X 5yrs =	\$2,250,000.00
Multiplied times 3% X .03 =	\$67,500.00
Total to spend for system =	\$67,5000.00
Your Store	
Annual Sales \$ _____ x 5 years =	\$ _____
Multiply times 3% if you have a computer already x .03	\$ _____
Multiply times 4.0% if you do not have a computer x .04	\$ _____
Amount for hardware and software purchase	\$ _____
Amount for training	\$ _____
Amount for supplies and upgrades	\$ _____
The total is your budget for a system =	\$ _____

In both of the above examples the total to spend for system would be the purchase price of the hardware and software. This would be depreciated over five years to equal two to four percent of sales each year. Financing charges, sales growth, inflation and operating efficiencies have been left out to make the calculation easier.

Using the above formula you will not go wrong financially if you buy the right system.

Other Issues

These Statements are True:

- Computer systems for small retail stores are now inexpensive: 10 years ago they cost \$20,000–\$30,000; today they can be purchased for as low as \$2,000–\$5,000.
- A bad or inappropriate system is far worse than none at all, and could destroy your business.
- A computer will initially add many hours of additional work and paper; but the right system will eventually make your life easier and your business more profitable.
- The sooner you analyze and select a proper system, the sooner you will reap the benefits. Your first computer won't be your last – don't make the mistake of waiting for prices to drop.
- Prices will always be dropping while your need for fast reliable information will always be increasing.

Quick Needs Analysis

A computer is a tool to make your number one priority of serving the customer faster, easier and more profitable. Understand also that most computer sales-people are not retailers; they don't know your business like you do.

While not all-inclusive, the following questions will address the most critical areas.

Before you go shopping for a system, you must answer many questions and communicate your answers to the computer salesperson so he/she understands what you want.

Fill out and take to your computer/system Sales Associate.

1. At what level do you currently capture/report sales?

- | | |
|--|--------------------------------|
| <input type="checkbox"/> Total store | <input type="checkbox"/> Item |
| <input type="checkbox"/> Department | <input type="checkbox"/> Size |
| <input type="checkbox"/> Classification/Category | <input type="checkbox"/> Color |
| <input type="checkbox"/> Line | <input type="checkbox"/> SKU |

2. At what level of information would you need sales detail?

- | | |
|--|--------------------------------|
| <input type="checkbox"/> Total store | <input type="checkbox"/> Item |
| <input type="checkbox"/> Department | <input type="checkbox"/> Size |
| <input type="checkbox"/> Classification/Category | <input type="checkbox"/> Color |
| <input type="checkbox"/> Line | <input type="checkbox"/> SKU |

The key factor in deciding what level of information you require is based on what you will or can do with the information. If you can't or won't re-order by SKU or item, then why track sales at that level? Remember that *the level at which you report sales also requires that purchase orders, receiving documents, price tickets, mark-downs and sales transactions all have to be written, entered and tracked at that level.* A purchase order for one item can turn into up to 18 lines or more of detail at the SKU level. That one item becomes 18 – 36+ stock numbers. If you go from classification tracking to SKU level, it is very possible to go from one number (class) to tens of thousands at the SKU level. So, beware of wanting too much detail unless you really need it and will use it.

3. What system of inventory control and valuation do you currently use?

Retail _____ Cost _____

(Many computer systems work on the cost method. The retail system is preferable unless you are also wholesaling merchandise.)

4. Do you have more than one store or more than one register in your store?

- Single store, single register
- Single store, multiple registers
- More than one store

5. Do you want reporting by the store as well as by the total company?

Yes No

You can control each store as an independent business and manually add all stores for a total company figure. However, beyond the very broad levels of information this would become impossible. For multiple locations, it is far better to have a system that networks which means that all information is available for consolidation and analysis whenever you wish.

6. How important are last year/season figures to you? Do you need them on the system for immediate comparison or is a print-out sufficient?

Live, on screen Print out only

7. How important is a next year or budget figure to you?

Very – I plan the future Not important

The ability to look at 'last year', 'this year' and to plan all together is very powerful in projecting budgets.

8. How important are the following functions?

	Very	Neutral	Not Important
Sales Reporting:			
Easy input at POS / or web orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UPC scanning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charge Cards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smart card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debit card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suspend a transaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gift certificate/Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credit voucher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Layaways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Charge type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Markdowns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multiple discounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monthly maintained margin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inventory Tracking:			
Best seller list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aged stock list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Balance of sale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model stocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic re-order points	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vendor sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vendor mark-downs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vendor returns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weeks coverage calculation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other:			
Integrated customer database / store & web	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can add fields to data base	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee scheduling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales Audit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UPC capable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EDI capable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated into Web sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purchase Orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purchase Journal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Payroll	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General Ledger / Accounts Payable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accounts Receivable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

'What-if' forecasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 month merchandise plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic back-ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uninterruptible power supply (do you have power outs?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. How do you want to look at information?

- Reports only Screen only Either/or; *my* choice

Some information, such as sales by classification or stock to sales ratios, is easier to analyze on a report while immediate-use information, such as stock levels, are better on a screen.

10. What are your future growth plans?

- Minimal, just sales increases One or more new stores

11. How important is specific customer information for mailing lists? (See next question also.)

- Very Moderate Not at all

12. How important is fast check-out for your customers?

- Very (30-45 seconds) Moderate (1 – 2 minutes)
 Not at all (2 – 4 minutes)

Data input at point of sale can be very slow if a lot of customer or SKU information is necessary.

13. How computer-friendly is your staff?

- Very Neutral Not at all

Some sales associates are terrified of a computer while others love it. Try to get a sense of how much training and support will be necessary. The easier and more fool-proof the P.O.S. procedure, the better.

14. How restrictive do you want the system to be? In other words, do you require access by only one or two people to certain functions?

- Yes No

Security is a very important aspect of having a computer in your store. Computer fraud is not only happening at large companies. How secure is your system to hacking or to unauthorized use?

Now act...

Once you complete this check list, copy it and give it to at least three software vendors. Ask them to propose a system that meets all your needs. Check out the vendors using the following sheet and also request a list of current users of their product and call them to ask about their satisfaction using the questions provided. When in doubt, enlist help from an outside unbiased source to make your decision. Don't be pressured, and don't put the decision off!

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Questions to ask software program vendors before you buy

	Vendor 1	Vendor 2	Vendor 3	Vendor 4
How many current users of software?				
How many current store sites in use?				
Names of users (5 to 10)?				
How long in business?				
How many releases of this package?				
What kind of support? 800 number, days, evenings, weekends, free? How long? Remote control? On site?				
Cost of updates, how often? How extensive? Cost?				
What is minimum/optimum hardware configuration? Brand name required?				
What do current users use for hardware?				
Do I have to use specific peripherals, i.e. cash drawer, scanner, printers, card readers?				
Is this total package, or just POS, MERCHANDISING, FINANCIALS or DATABASE? Which programs will it work with, which won't it?				
Is there an annual fee or do I have a choice in buying updates?				
Can I buy only part now?				
Is there installation assistance?				
How does it pay for itself?				

Questions to ask a fellow retailer before you buy a system

NEVER purchase a product that is not in use. You do not want your business to be the test for a system. Ask the following questions of current users of a software product that you are interested in buying. Call a number of current users in similar business to yours and ask the following questions:

Retailer Name:	Phone #:
How long have you had the package?	
Do you have the complete package or just one or two modules?	
What release is it?	
What do you like best about the product? How does it help you run your business better?	
What is the biggest problem that you currently have with the software?	
What hardware do you use with it?	
How has the support on install and ongoing operation been?	
Would you buy this software again?	

Try to find someone who has been using the software for at least six months, preferably a year. Brand new users are often unreasonably optimistic or pessimistic depending on their experience during the install, which is not necessarily a good measure of the product's worth.