Turning Convenience Stores Into

Cash Generating Monsters!

Written especially for the technology squeamish

By Bill Scott & James A. Hawkins, Ph.D.

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Bill Scott

Table of Contents


KEITH'S
SUPERSTORES


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KEITH'S
CAFÉ

Introduction

Would you like to:

- Double, triple, or quadruple the net profit in every store— FAST
- Immediately recover the value of unneeded stock and put the money back into your pocket in the first ninety days
- Increase your product lines by 100% or more without spending another dime
- Virtually eliminate employee theft, shrinkage and spoilage in your stores
- Quickly identify and eliminate 100% of your *dead stock*
- Never again run out of profit producing items
- Constantly surprise your customers with exciting specials throughout the day
- Be in all of your stores at the same time
- Improve employee efficiency ten-fold
- Change prices on items in your stores instantly using a cell phone, your office desktop computer or a cheap laptop PC from anywhere an Internet connection is available
- Force every product to perform to its maximum profit potential
- Monitor store sales and purchases from anywhere, anytime
- Institute tight, iron clad restrictions on every item that comes through your doors
- Organize your coolers and clear your aisles of debris
- Make your customers come back several times a week, just to see what you're doing next
- And much, much more

This is absolutely the best time ever to be in the convenience store business.

For decades now computer software companies have sold convenience stores the same old stuff… over and over again, promising to streamline their companies, increase their profits and decrease their costs. The results? Most convenience stores are ***making a horrifying net profit before taxes of 2% or less***. Something's terribly wrong with this picture.

It reminds me of the old joke: *The difference between a computer salesman and a used car salesman is— a used car salesman* ***knows*** *when he's lying*. It might be they're all afraid to tell you something I'm not. Could it be, maybe you're doing something wrong?

When computers came onto the scene a large majority of upper-level managers, knowing little or nothing about computer technology, relied on their information technology (IT) *experts* to steer them in the right direction. Their mantra— "We can't do this, we can't do that, that would cost too much, it would take too much time and require more resources than we have," yada, yada, yada. Could it be? Maybe you've got one too many experts? Henry Ford wrote in his autobiography, "The moment one gets into the 'expert' state of mind, a great number of things become impossible."

When IT people become wedded to a particular technology, one they wholeheartedly recommended, and especially one that is reinforced by trading partners and associations, they are not likely to be the ones to fess up, look like idiots and tell you, "Sir, we've got the wrong stuff."

As a computer programmer of thirty-two years I'm ashamed to admit, most IT experts are the most self-centered, egotistical, arrogant, 'know it alls' in the field of business, and everything they say is in the interest of job security. Their favorite computer is the one they use, and their favored programming language is the language they

know. Should you ask a computer programmer if a solution is possible, they will craft their answer around the world in which they live, they'll consider the question, try to fit it into the environment they're familiar with, and if they think it threatens their position in any way, you are likely to get a thousand excuses as to why it can't be done.

A professional, systems analysts will look at the problem and after all avenues have been explored, he or she then identifies the technology needed to get the job done. Unfortunately, there are far too many IT experts and not enough systems analysts working in convenience store companies today.

Computers are simply machines. They could care less if you're profitable or not. They perform according to the assumptions of your staff, and in most cases the assumptions of your staff back in 1983. *Hey, let's not throw the baby out with the bath water. Let's just spend more money and speed up the mess.*

It's apparent to me the 21st Century is drastically different from the last one. Competitors who have broken out of *IT Jail*, unencumbered by thirty years of flawed assumptions to slow them down have got you and your business in their sights. They want to annihilate you, to steal your customers and lay waste to your chances of survival. 'Fairness' is not a word in their vocabularies. They don't have a compassionate bone in their bodies. They simply want to hunt you down and exterminate you.

I began my relationship with convenience stores in 1978 when a very confused young man, recently promoted straight out of college by his father, who had bestowed upon him the title of 'Vice-President' of their new line of convenience stores, came into my office and tried to explain his dilemma.

His father had been an oil marketer since the time a major fuel supplier plucked him from his vocation of 'commissioned fuel agent' and made him an 'oil jobber',

running his own business, paying his own bills, and managing his own employees.

Since that time I have watched the oil marketing business gradually transform from selling gasoline, oil and grease, to becoming convenience store operators of various sizes.

The tumultuous eighties laid waste to many oil jobbers as the convenience store business exploded. So much so, at one point I thought they were going to start building stores on top of one another because the availability of good locations was disappearing right before my eyes.

In the late part of the eighties two things happened that changed everything. 1) The major oil companies began to compete with convenience stores and 2) Congress closed up some major loopholes in the tax laws. Then, Walmart's CEO made it clear that he wanted the convenience store market. Ever since, it's been a war to survive.

I assure you, **you will not have to learn how to do anything that requires a great deal of money and time.** Most of what I'm going to relate to you is intuitive. Deep in your heart you may already sense I'm right, but your preconceived assumptions and especially those of your staff may cause you to have a tendency to reject some of the things I'm going to tell you. But I promise you, I have tried these things and they work. I believe you'll find them to at least merit your consideration. All that's at stake is an evening of reading.

Sooner or later, something has got to change. Inflation is already upon us. The costs of grocery purchases are going to rise faster than your store managers can grab their label guns and because of that single issue you're profits will plummet.

Your competitors are converting more and more of their stock to private labels, undercutting you at every turn. You will need to grow to survive, but one thing you do not

want to do is grow while maintaining the status quo. Growth for the sake of *growth* is deadly. If you're losing money now, the results of uncontrolled growth will cause you to lose even more.

There is an answer, and it starts by taking total control over every single item that makes its way into your store. But it doesn't stop there. You've got to maintain control over those items as if they were life vests in a raging storm and follow them until your customer buys them, takes them out of your store, gets into his car, and drives away.

You will not be able to do this manually, so a whole lot of technology is involved. Technology that you don't have and you may not be able to buy. The good news is, you can use it on a pay-as-you-go basis from various companies that are desperately looking for your business.

Your suppliers want to help you, but their hands are tied. They're dealing in dollars, you deal in pennies. They sell in bulk, you sell in singles. They use large mainframe computers and you are using Windows-based PCs. They don't understand your environment any better than you understand theirs.

Walmart became the world's largest retailer by forming *Managed Supplier Partnerships* that compelled suppliers to help Walmart manage their own inventory. It worked, and everybody benefited from it, but they each had to alter the way they conducted business to make it work.

It took a long time to perfect this environment, but they did it, and as they worked out the kinks they laid the groundwork for the rest of us. So, thank you Sam Walton for the great education. Let's not let his benevolent contributions go to waste.

The change I'm talking about will cost you less, not more, and there has never been a better time to get started. The fuel that propels this engine of opportunity is the Internet. Changes over the past eighteen years, caused by

the Internet being released into public domain have provided opportunities like none other in the history of business.

If I had told you back then you would be able to change prices on a bar of candy while waiting for your turn at the tee on your favorite links, you would have thought I was nuts. But I'm doing exactly that this very minute, standing on my back porch on the banks of the Pearl River, sixty miles away from a convenience store in Hattiesburg, Mississippi. I can see a list of the last purchases that came through the door and the sale of the last pack of cigarettes that left the store, items that are on the same ticket and the **actual** amount of profit that was made on the tender.

You don't have a whole lot of time, so let's get started. For the next few hours, follow me through the pages of this book and I'll show you how you can do the same things… and more.

And yes, this is absolutely the best time ever to be in the convenience store business— **if** you would like to turn your convenience stores into **Cash Generating Monsters!**

The Past & Future of Convenience Stores

While this book serves to document a seven-year project in the creation and implementation of Supply Chain Management and Cloud Computing within the convenience store industry, it is by no means the final word. As we stand at yet another threshold of a new revolution in computing technology and see how it can absolutely, guaranteed, catapult small to medium-sized businesses into a new dimension of retailing, the lessons we have learned serve as our guide to the future.

There's nothing really complicated about this. It's just common sense— things you would have figured out yourself if you knew what's available to you. If I had presented these ideas fifty years ago, they would have made no more sense to you than the notion you could carry a telephone around in your breast pocket.

If you're old enough, we marveled at Dick Tracy's wristwatch/communicator from the Sunday comics, but when you look at the ear-buds and tiny cell phones hidden away in pockets and purses today, you can see we've already done better.

Not only have we proven unequivocally such a move to these new technologies is necessary, it is inevitable, and our research has led us to discover some of the surprising advantages this industry has over its larger competitors. We have also uncovered and solved many of the unexpected problems we encountered along the way, and we present them here so you won't have to suffer from making the same mistakes.

Personally I've had experiences in other retail types of businesses as well, but the convenience store industry is where I've gained most of my knowledge. So, this book is written expressly for convenience store operators based upon years of beating my head against the wall to work out

every tiny detail. It makes no difference whether you're a one-store Mom & Pop or a huge enterprise like 7-Eleven, the principals are the same regardless of your size and resources. One day one of my customers said, "You should write a book." Well here it is.

When you set out on a project to change the core beliefs of an industry that span seventy years, as you begin to dig into the roots of the business processes already in place you immediately encounter a fierce, firestorm of resistance. I have been in red-in-the-face arguments and even thrown out of one beer distributor's office who subsequently told my customer that I was not to so much as darken his door ever again.

Old Habits Die Hard

Ann Landers once received a letter from a reader who asked, "Why is it necessary to cut off the end of a ham before you cook it?" After some research, the editor of the column reported the practice was passed down from ancestors whose ancient stoves were not wide enough for a whole ham. They had no alternative but to remove the butt of the ham in order to fit it into the oven. The practiced was passed down through generations to follow, along the way, losing the reason for doing it.

While working on our project, we learned that employees do the things they do because they were told to do so by someone who got their instructions from their predecessors, who got their instructions from **their** predecessors, etc., etc.

The primary reason it is difficult to get people to change is because they don't know why they're doing what they're doing in the first place. If you've every altered the daily store report form, you probably know what I'm talking about.

Change is the primary enemy of any new project and one of the worst things you can do is make changes that

appear to have no practical purpose. Things go a lot easier if the people affected know why the change is necessary.

I bring to the table thirty-two years of experience in working with hundreds of oil marketers, convenience store operators and their employees; a few with one or two stores, some with twenty to thirty stores, and some with several hundreds of stores. Over the years I have seen some do well where others have failed.

I began working in convenience stores when they were called *filin' stations*. Inside the stores I have performed almost every task that can be done in a convenience store. I have cleaned toilets and washed floors when employees have refused to do it. I've ordered inventory, affected change in policies, managed employees and provided functioning computer systems in convenience stores and at stores' headquarters. My experiences while doing the jobs that most software companies have not, gave me the distinct advantage of seeing firsthand, the results of the things I have accomplished.

Consequently, I have collected a great deal of technical knowledge in this unique industry. When I design a process to work inside the stores, I personally use the equipment at the store to see how difficult it will be for others to use. Then I change it to serve their' capabilities and their' needs.

My emphasis is on inventory control, because from where I sit the lack of inventory control and merchandise marketing is killing the convenience store industry. As I write this book, I am painfully aware of the future. I don't like what I see. It's time to get up close and personal with our inventory and make it work for us, or else the sheer volume of these little non-producing squatters that occupy our stores will eat us alive.

In 1964, as I sat before a Southland Corporation (Pak-A-Sak) executive at his office on Fairfield Avenue in Shreveport, Louisiana, he expounded on the virtues of the

penny. I was only twenty-one years old at the time and made my living pulling the morning shift at KJOE Radio and selling radio commercials in the afternoon.

He claimed if he could get his employees to do one simple thing he could double the profits in his stores. His goal was for the clerks to ask the customers at the check-out counter if they needed anything else before ringing up the sale. That's it. I will never forget that meeting or the impression it left on me. I thought, *if doing one simple thing in stores can double its profits, how about two simple things? Could it quadruple his profits? How about a dozen or more? Is there really that much opportunity being overlooked?*

Later I joined the Yellow Pages and sold telephone directory advertising in New Orleans. One of my customers was a man making a fortune selling prescription drugs and drug store related items out of a warehouse. That's right, no retail stores. People would call in their prescriptions to secretaries taking orders over the phone and his team of motorcycle riders would deliver them to his customers' homes.

He told me something that fell in line with what the Southland Corporation executive mentioned: When his salespeople would take his customers' orders, they would ask them to lay down the phone and check their medicine cabinets to see if they needed anything else. Whether they needed anything or not the order-taker ended the call by suggesting something that was currently on sale. Rarely, did the customer get off the phone without buying something else. The owner of the business would incur the cost of the delivery regardless of whether he delivered one product or two. Why not offset the expense with a little profit from something the customer didn't know they needed?

When I started working directly in the convenience store industry in 1978, 7-Eleven's success prompted many oil marketers to get serious about entering the convenience store business. At first the industry was made up of small

fillin' stations— selling oil, bulbs, batteries, spark plugs, cigarettes, chewing gum and gasoline. Very few of my customers sold grocery items as did 7-Eleven.

I remember the first store I ever audited in 1983, as if it were yesterday… it was one of those filling' stations in Lufkin, Texas.

There were ten or twelve cans of Gulf oil on the shelf, spark plugs, a few tires and batteries and that was about it. I picked up a quart of the oil looking for a price and seeing none, I asked the clerk who was sleeping over in the corner, "What's the price on this can of awl?" *In Texas, 'oil' is pronounced 'awl', else they may not know what you're talking about.*

The fellow took one look at the can and thought for a minute. Then he finally spoke up, "Luther charges $1.25. I usually get 89 cents".

Does that surprise you? It did me. Now, flash forward to September, 2010. Do you know if you walk to the counter with a two liter bottle of just about anything two cashiers will often give you two different prices? Sometimes they'll even stand there and start an argument about it.

Well as time moved on, gasoline brought the customers to their stores, and putting bathrooms inside the stores created opportunities to display a limited number of retail items for sale. In pre-Walmart times retail prices were much higher than the same items sold in conventional grocery stores.

The employees that worked at these stores evolved from fillin' station attendants to clerks. Most of the inventory came from the oil marketers' own stock. Markups were generally done by raising the price of items to produce a 30% profit. *Many made the mistake of multiplying the costs by 1.30 instead of 1.43, realizing a much smaller profit than they expected.*

Operators began to experiment inside their stores to incorporate new ideas to increase sales. If they wanted to increase the turns of a specific item, they would put it

between the customer and what he came there to buy and they would sell more of it. Giving less taco sauce away produced a small increase in profits. If items were mysteriously disappearing, putting them near the sale's counter lessened their losses.

One of my customers performed white glove inspections, gigging employees if the gloves turned black. Lights were erected around darkened pumps and gas sales to women increased. They were doing every little thing they could think of to increase traffic in each and every store.

That was an exciting time in the convenience store industry. As operators began to acquire more stores they began to stock more and more non-fuel and less automotive items. Operators were reluctant to hire new employees to manage their grocery stocks.

Stores were commonly laid out over a 100-mile radius, and the logistics of managing their own inventory from a central location was difficult if not impossible. As more stores were added it *did* become impossible.

Unable to keep the stores stocked, they approached their suppliers who agreed to keep them stocked for them; thus, a managed supplier partnership in the first degree was formed. Finding an excellent outlet to sell their inventory, suppliers became more aggressive and set up programs to expand their markets and bring on new owner-operator outlets.

In order to assist the stores better, the concept of the *pre-salesman* was quickly adapted. Working on commissions pre-salesmen started looking for spaces to stack more items. Rack jobbers did the same.

Manufacturers, seeing opportunities to move more products while working the trade shows, enticed operators to buy *shippers* and *deals* which provided greater opportunities to test new products.

Recently, I saw a box of candy that I swear came in a shipper three years before, because I know they discontinued

that stuff. When I opened the wrapper of one bar, the chocolate had turned white and it crumbled in my hands.

Convenience store buyer's of these products, really had no idea how much of what items were sitting in their stores. Ideas of filling stores to capacity were touted as being 'good business practice' as customers were put off by shelves that looked *picked over*.

I would think they would be more put off by brown chocolate that had turned white if you ask me.

At first the system worked fairly well, but the sheer volume of inventory being transferred and the distances between stores and supplier warehouses lessened the suppliers' ability to keep up. Little by little, operators lost control of what was going on inside their stores and the stores suffered.

All-out wars erupted between drink suppliers, cigarette manufacturers, and rack jobbers. Pepsi would be cheaper than Coke one week, only to go the opposite way the next.

Cigarette manufacturers demanded more shelf space to display merchandise that defied all attempts of selling and the 'cigarette police' came around to insure contracts were being met.

Gradually stores began to resemble warehouses and sales' floors turned into new product test labs for manufacturers. In a struggle to one-up the other guy, suppliers and manufacturers literally commandeered the stores' shelves.

During the late seventies and early eighties, the convenience store industry experienced tremendous growth. Fortunes were made through fuel margins, in some instances as much as forty cents a gallon. Then something happened…

The major suppliers of gasoline products to the stores began to open up more and more company operated locations, infringing on the independent convenience store operators' markets. If you were branded, you were

forbidden from competing with the major fuel company-operated stores.

In 1986, Congress closed many of the loopholes in the tax system, and the industry began to experience a downhill slide that continues through today. Walmart exploded in size and developed the world's most efficient inventory control system. With an insatiable appetite for sales, Walmart stepped into the fuel market.

Grocery suppliers began experiencing problems of their own. With stores already crammed full of unsellable merchandise there were no places to put new products. Wholesale prices of groceries to retailers began to rise. Inside the stores, margins which once were much higher began to shrink to 28% then 22%. Today, a convenience store operator has to be very creative to see a 18% gross profit on overall inside sales.

Note: As of this writing Kroger recently announced it will be forced to pass the rise in grocery prices along to its customers, citing more interest in private brands. ***Tell your managers*** *to scrutinize all incoming grocery invoices to determine if some items are now being sold below cost.*

Convenience store associations, in many cases heavily financed by suppliers with deep pockets began to exercise influence over struggling retailers, guiding them in directions that served the suppliers' agendas.

To compensate, convenience stores have been forced to explore new avenues of making up for lost profits. One of their remedies included an expansion into deli. They are beginning to focus more on food services— fried chicken, pizza, hamburgers and French fries where greater profits could be found; even leasing parts of their stores to large food franchisors like McDonalds, Wendy's and KFC.

Taking over large quantities of shelf space with deli items, suppliers suffer as they have fewer places to stash their merchandise. Franchisor royalties cut deeply into store profits have prompted some locations to dump food services altogether.

As operating expenses continue to spiral out of control, reducing costs has become a primary concern for everyone in the industry. The largest controllable costs being salaries and store maintenance, smaller, less profitable stores are simply closing up shop or selling out to Mom and Pop's and to their competitors. Those that continue to hold on are being forced to lower customer service level and the overall effect has been a further decline in store image. Raising retail prices to make up for the losses gives them the appearance of being 'price gougers'. Customers seeking ways to stretch their budgets simply buy $5 worth of gas and drive away.

Government mandated wage hikes and worries about health care are forcing stores to lay off employees, prompting them to maintain a skeleton crew of minimum-wage workers, some of which are very talented live from paycheck to paycheck, unsatisfied with their pay and always looking for a better job.

The downward spiral continues, and today the average convenience store is lucky to see single-digit net profits before taxes. It makes one wonder: Why would someone invests a quarter-million dollars to realize a profit slightly higher than that offered by banks on CDs?

Knowing the history helps us to understand better. If the convenience store industry was suggested today, it might never get off the ground.

Retailers throughout the world are facing similar problems. The current economy, notwithstanding, the convenience store industry was already desperately in need of reinvention.

The expanding convenience store industry was sired without an inkling of inventory control in mind. Suppliers said they'd handle it, but they no longer have the resources to keep up with the stores' needs, so they just throw

everything they can onto the stores' shelves and pray that something sells.

Yet, suppliers are quite possibly missing their greatest opportunity. As it stands nearly 150,000 convenience stores provide an outlet for the sale of suppliers' and manufacturers' products. Suppliers have the power to increase sales in their retailers' stores, but instead they continue to use these stores to warehouse their inventory, hoping the retailers will figure out how to get rid of it so they can bring more.

Suppliers are making a big mistake. By not getting involved in the retail process, they have created a disconnect in the supply chain. It is within their power to help their retailers manage their inventory, and someday they will figure out in order to increase their sales they'll have to become more involved in moving more products into the hands of the consumer.

Those convenience stores trying to manage their own inventory today don't have the tools to do it effectively nor the desire to battle with suppliers who are moving more inventory into the stores than the stores can handle.

In my view, based on my knowledge and experience, the answer lies not just in inventory control, but in other factors involving *marketing techniques* and *data processing*.

Literally tons of paper are being generated daily that few operators know what to do with, and by the time they get the needed information on their desktops, it's too late to be acted upon.

We must thoroughly examine the techniques employed by other, more successful enterprises and avoid knee-jerk reactions that make these actions appear impossible in our situation. We must do the impossible: Figure out ways to employ their techniques into our business practices.

The *number of turns* is infinitely more important than the volume of inventory on hand. Sit down with your suppliers and get their commitment to help you help them.

We must realize that there are few experts and the market changes every day.

We cannot continue to operate in the past. The salad days of convenience stores doing business as usual have long ended and it's time we re-evaluate our old ideas and come up with new ones more attuned with today's technologies. We are constantly learning and there are infinite opportunities to change for the better.

Rips in the Environment

I can't remember where I picked up this idea, but it's the best metaphor I know that describes the life-cycle of market leaders.

In a Fortune Magazine article dated July 21, 2003 entitled "Churning Things Up", Andy Grove, Chairman of the Board of the Intel Corp. suggested quantum leaps in the environment in which a business operates is a product of 'non-linear strategic change'. He went on to differentiate between linear and non-linear strategic action by saying: "If the effect of a company's strategic action changes only its own competitive position but not the environment, the action is *linear*. In contrast, a *nonlinear* strategic action sets off changes in the environment that the company, as well as its competitors, then have to cope with."

It has been suggested Walmart is not so much a competitor as it is *an environment in which all others compete*. By initiating a combination of defensive and offensive strategies and utilizing the five categories of strategic thrust, differentiation, cost, innovation, growth and alliances, Walmart executed a non-linear strategic action that altered the environment of retailing and propelled them into the position of *market leader*.

Chairman Grove went on to say, "Classical competition theory doesn't address situations like this. In fact, it implicitly assumes that the environment in which a company operates is basically a given and limits itself to suggesting ways in which a company can better its lot in this environment."

But it doesn't have to be this way. There's a simple principal that suggests, if you wait long enough, an opportunity will come out of left field that will create a small window of opportunity, allowing you to seize a portion of a market leader's business, possibly annihilating him entirely.

There are many examples, but the two that stand out above all others are Alexander Graham Bell's invention of

the telephone and the creation of the microprocessor in the early to mid-1970s that brought down a rain of destruction on Western Union and IBM respectively.

When Bell's principal investor tried desperately to cut his losses by offering Bell's patents to Western Union for mere $100,000, the market leader of telegraph communications demurred, claiming Bell's 'telephone' was merely an 'electrical toy'. The smart guys at Western Union failed to notice the rip in the telecommunications environment and left it to a 29 year-old geek from Scotland.

What's so fascinating about this event is it's exactly the way IBM characterized small business computers in the mid-seventies.

If that alone is not coincidence enough, consider this: In the end, Western Union invested in Bell's invention just as IBM made a huge investment in Microsoft.

The new game changer I am talking about is a reacceptance of *time-sharing* being called 'Cloud Computing'. But it's not just Cloud Computing alone. Cloud Computing makes possible another technology known as 'Virtualization'. In other words, the motion to evolve to Cloud Computing has been seconded by a motion to adopt *virtualization*. Virtualization will combine the power of thousands of computers to drive the cost of data processing down even further.

This is a huge event, but it will remain unseen by the majority of upper-level managers who are currently taking their advice from data processing personnel, fighting like tigers to prevent this change from taking their jobs.

Technology Impact Analysis

Twenty years ago, James Martin characterized 'aversion to change' in his trilogy, *Information Engineering*[1]. He said, it occurs due to the absence of a plan to monitor the changes in technology that affect a business. He went on to write: *It*

[1] ISBN 0-13-464885-4

is the job of top management to perceive the enterprise not as it is today but as what it can become in the future.

Dr. Martin suggested information system plans should look ahead by at least two years, when in reality most convenience store operators place too much emphasis on limiting the costs of data processing and attempting to keep systems running with assumptions extending backwards, as far as five decades.

In Marcia Layton Turners book, *KMart's 10 Deadly Sins*[2] she devotes an entire chapter to 'Technology Aversion,' where she writes: *While Walmart sought to use technology to revolutionize how it did business, exploring the myriad ways computer systems could support its mission to provide "everyday low prices," KMart limited its thinking, focusing mainly on using information systems to cut cost and reduce waste.*

I think this is important because as I look at convenience stores, I see no indication of them putting any emphasis whatsoever on providing customers with *everyday low prices*. If you think the industry is not geared to do that, that in itself is reason enough to re-evaluate your business practices. Lowering the prices on items to help your supplier move more product through your stores is not what I'm getting at here. We'll investigate that costly mistake in future chapters.

Walmart recognized their supplier's aversion to change when they created Retail Link®, literally forcing their suppliers to adapt. You don't connect to Retail Link®, you don't get Walmart's business. Here's the proof from Walmart's own corporate website:

Retail Link® provides information and an array of products that allows a supplier to impact all aspects of their business. By using the information available in Retail Link®, suppliers can plan, execute and analyze their businesses—thus providing better service to our common customers. Retail

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[2] ISBN 0-471-43593-7

Link® is a website that is accessible to any area within your company.

Walmart requires all product suppliers to participate in Retail Link® because of the benefits it provides. Should you become a supplier with Walmart, you will be provided with the requirements for accessing Retail Link®.

Go back and read those requirements again and notice Walmart uses the term 'common customers'. Walmart wants their suppliers to understand, Walmart's customers are their suppliers' customers, pulling their suppliers right along through the selling process. *Walmart is an outlet for their suppliers' inventory, plain and simple.* It's in stark contrast to the way convenience stores work with their suppliers today.

The idea of using information systems as a strategic weapon is not new. On November 10, 1986 I was coming back from lunch with an oil jobber/convenience store operator for which I continue to hold an enormous amount of respect. As we passed a local RaceWay store, he noticed the operator perched on top of a ladder raising his gasoline prices.

He turned to me and said, "You can tell that fellow doesn't have a good computer system like what we've got."

You might remember, all during the month of October 1986, gasoline prices had been dropping like a rock, in some cases as much as $.05/per day. The system I designed for my customers kept a moving-average cost of gasoline on a daily basis, taking in not only the current rack-price of fuels, but the average value of the total of gallons stored in all tanks in a company's inventory.

He added, "All during the month of October when fuel prices would drop a nickel, that guy would run up the ladder and drop his prices a nickel.

"Of course, in order to be competitive we had to drop our prices too. I had six million gallons in my tanks that I

had paid a higher price for, and every day I saw where I was losing $0.045 cents a gallon on each gallon that went through our pumps.

"Now it's the 10th of the month and his CPA just gave him his Financial Statement and now he's raising his prices to try and make up for his losses during October," he added.

"Yeah, but you had to drop your prices to stay competitive," I said. "So what's your point?"

"The point is, I **knew** I was losing $0.045 a gallon and he didn't. I made adjustments in my business to compensate for those losses and as a result, I saved at least $0.02 a gallon more than he did. That makes me a better businessman than he is."

It wasn't so much what my customer said that got me to thinking, it was the implications. I had been programming computers for eight years at the time and I had always looked at data processing as a way to lessen expenses and produce financial statements to be used in a reactive environment, allowing a business owner to see his past mistakes and correct them in the future.

That conversation caused a dramatic shift in the way I looked at computers. I began to see how computers could be used as *strategic weapons,* enabling one to orchestrate events that could attack and destroy a competitor.

Note: The RaceWay station closed a few months later and my customer is still a leader in the market.

For me, the possibilities of *Strategic Systems Vision* fell into place. It was the way everything worked. Microsoft's triumph over IBM, Fed-Ex's successful attack on package delivery, American Airlines creation of the SABER system to take control of the air travel industry, Bell's success over Western Union, Edison's incandescent light bulb and his subsequent victory over natural gas companies, etc.

You see, at some point in time everything changes, not so much because a company invents a new technology, although that's true in a number of cases. No, it's not that

difficult. You simply have to recognize the possibilities of a technology someone else created and adopt it to your unique circumstances. In other words, to become a market leader, you have to be the **first** to have the vision to recognize it and the resources to implement it successfully.

IBM didn't miss the opportunity to dominate the small business computer market by accident. Management purposely avoided it like the plague. When the successes in the market became apparent, even then, they subcontracted the building of the IBM PC (IBM 5150) to an third party and licensed the operating system from Bill Gates orchestrating possibly the most amazing business blunder in the history of the world.

In 1987, IBM tried to correct their error by introducing the IBM PS/2, but it was too late and their new, far superior operating system (OS/2), ended up in Bill Gate's pocket and became *Windows N/T*. Mercifully, a decade later IBM gave up completely and turned everything over to the Chinese. Personally, I was relieved to see it over.

Desktop computers and the Windows operating system are *transitional technologies* that have bridged the gap between *time sharing* and *Cloud Computing* as surely as videotape bridged the gap between celluloid film and the DVD. And that's not the end of it. DVD is a transitional technology bridging the gap between videotape and downloadable streaming video. *Blockbuster Video* either learned the lesson too late or management purposely denied the rise of *NetFlix*.

It's obvious. Everything is heading toward a common technology that's been around since 1969. *Everything* is converging on the **Internet**.

Maybe people will never do their grocery shopping with a web browser. It's been tried before. But then, it took CDs a decade before they dominated the music industry.

Everything you plan, no matter how silly it may seem, you need to consider the Internet into every equation. The

Internet has already affected the convenience store industry in many ways, but as the saying goes, “you ain’t seen nothing yet.”

Buzzwords

We all hate buzzwords. Nevertheless, there are two you need to be familiar with to get the most out of this book.

Big-box retailers and players like Walmart, Target, Couche-Tard, Kroger, 7-Eleven, and others are linked up to multi-million dollar data centers to take the lion's share of the market and leave you to pick up the scraps. Now… they want the scraps too.

You can do better, because you have something they don't have— the ability to convert what you already have into a cash generating powerhouse without investing the hundreds of millions of dollars they had to invest to build and run their already obsolete technologies.

They had to build their technologies from scrap. On the other hand, you can rent it on a pay-as-you-go basis. Some of it might even be free. There are no limits to its expansion capabilities and the cost will decrease as you grow. For example today, if it cost you $X per store, 10 stores will cost $X*10, not $X*10 plus $10,000 for additional equipment. We've got our cost down to about three-packs of cigarettes a day already, and if things keep going as they are, within the next decade we will probably be able to reduce it by another 50%.

Doesn't it irritate you every time somebody from your computer department tells you you've got to spend another huge chunk of money on systems you just got through paying for? How about these exorbitant charges for on-going software maintenance? Bug fixes take months, if not years to come about and when you consider what little has changed since you purchased your last system, you wonder what's the point? When I hear someone just spent $20,000 to $40,000 for a new convenience store software program it makes me sick at my stomach. They'd probably get better results with Quick-Books and spreadsheets. As companies

move to renting software rather than buying it companies that sell software will collapse.

It seems like new versions of the Microsoft operating system appear faster than you can upgrade your current systems from the last release. Viruses are written for Microsoft Windows. Viruses and Trojans do not run on mainframe computers and they never will because of their built-in government level security.

There are always problems. Networks are down more than they're up, computers viruses run amok and users spend more time waiting on repairs to their desktops and networks than they do on their jobs. Employees play games when you're not looking, send and receive personal emails, load pirated software and make illegal copies of programs that require licensing and can get you into real trouble. It's doubtful that 90% of existing companies could survive a Microsoft audit today.

Note: Microsoft is getting very sneaky about how they get into your office computers to look around for illegal code.

Desktop computers and servers never have enough memory and computer hard disk capacities are always at their limits. The good news is, *all that's coming to an end.* These are some of the expensive elements of data processing I have strived to eliminate.

I'm going to show you how to do better and lower your cost of data processing by as much as 95% and get more *bang for your buck*. And if you want to do it on your own, I'll even help you do it.

Buzzword #1: Supply Chain Management (SCM)

It involves something you may have subconsciously tried to avoid since the day you launched your company.

SCM is the life's blood of a network of interconnected businesses. This network is not limited to you, your suppliers and your customers. Networks don't work that way. Networks are viral in nature— bilateral as well as unilateral. Your associations with your suppliers not only

include you, they also encompasses your suppliers' manufacturers, their suppliers and **many of your competitors**.

You should learn how to develop a state of *intensified cooperation* with your suppliers and in some ways with those companies that would use your information to make your life miserable, while at the same time maintaining the level of security you must have to protect your vital secrets.

This network is growing rapidly and will continue to expand whether you want to be part of it or not. It provides both opportunities and threats, so it must not be done haphazardly.

The proof of the ever-expanding network is apparent in the successes of social networks such as Linked In and Facebook. Business people are learning, through the sharing of information they can leap ahead of their competitors as their competitors resist change and are slow to adapt. The aversion to change is so pervasive, it deserves constant re-evaluation. It's your decision, you can join in the race to the top or you can follow along behind the herd.

Suppliers are eager to assist you, but they can't until you understand, in order to do business in the 21st Century you are going to have to remove some of the focus on the mortar and bricks of your own establishment and direct your attention to the overall health and advantages of the global network in general.

Buzzword #2: Just-In-Time (JIT)

An extremely important element of SCM. So much so, that in 1913 Henry Ford created an SCM environment by building his plant and many supportive manufacturing facilities on a single site in Dearborn, Michigan. He did this for the sole purpose of creating a JIT supply of automotive parts to streamline his assembly lines.

There is no perfect definition of JIT. Computer software companies are pitching the term around to make their customers believe they are on top of the subject. However, a

pure JIT environment is not yet possible in today's world, so you're apt to see a plethora of variations on an 'amazing new technology' that's been around since Henry Ford's Model T.

For example, receiving your purchase invoices electronically does not constitute having a JIT environment, nor does using hand-held devices to transmit your orders to your suppliers. In fact, these two examples are things that prevent JIT from working in your favor. Doing mathematical gymnastics with purchases against sales won't do it either. Did I just surprise you? Well if you continue reading this book, I'll explain.

I recently had a meeting with a mentor for the Mississippi Technology Alliance and he surprised me with the statement: "Everybody's already doing that."

When I asked him "How?" he jumped up from his chair, chalk-marker in hand and scratched this on his whiteboard:

Beginning of Month	100
Received	70
Sold	40
End of Month	130

I looked at him for a moment and said, "There's a problem with your equation."

He looked at the board and then back at me. "No," he insisted, "100 +70 -40 =130." Then he handed me the marker with a smug expression on his face and I scribbled the following table next to his:

Beginning of Month	80
Received	50
Sold	32
Audit	95
End of Month	90

He stared at it for a moment as if I were nuts. So I explained: "You didn't have 100 at the beginning of the month, you only had eighty because the person who counted it made a twenty unit mistake.

"You didn't receive seventy. You only received fifty because your supplier billed you for twenty you never got.

"You didn't sell forty. You only sold thirty-two, because eight were over-rings.

"The auditor only found ninety-five because your cashiers ate three, and the count was taken four hours before the close of business after which you sold five more."

Such is the world of convenience store reality.

What precisely is JIT?

JIT suggests a product will arrive just in time for the next use or the next sale— not one moment before or one moment after.

Obviously, in retail there is already a problem. You simply cannot purchase and physically replace a sold item with another one moments before a consumer grabs it as you could in Henry Ford's assembly line. So, there is a *costly* delay of sorts between the moment the product is placed on the shelf and the instant the customer reaches for it. I emphasized 'costly' because the very second that item takes root in your store, it's costing you money. Therefore, in retail, the purpose of JIT is to lessen the time between when the product is *purchased* by you and when the customer *acquires it*.

At the root of the problem is the lack of more frequent deliveries from your suppliers. Suppliers argue making more trips to your stores cost too much money. They are right… if they continue to bring you the wrong stuff. However, if they would bring you only what you need to meet customer demand between deliveries and a little

safety stock, their profits would increase over and above what it cost them to make the extra trips, you would increase your sales by as much as forty percent, and you could concentrate on giving your customers fresher, more timely products in an environment of 'everyday low prices' that seems to be so important to Walmart.

The debate over JIT inventory control is confusing, and the explanations can seem quite ambiguous. Sometimes the explanations appear to be downright contradictory.

At the WIKIPEDIA website, they describe JIT as being: *an inventory strategy that strives to improve a business's return on investment by reducing in-process inventory and associated carrying costs. Implemented correctly, JIT can improve a manufacturing organization's return on investment, quality, and efficiency.*

I don't have to tell you— inventory is an **investment**. Having an excess is a waste of precious capital that could be used for better, more profitable purposes. Precisely how much of a waste defies an exact calculation, but as it stands, with the average net profit in a convenience store being as small as it is, the money invested in unneeded inventory would produce a greater profit for you if you put it somewhere else. It may be a matter of only a few cents, or it might be more than a fortune. In this day and age, investing capital in something that will not show a profit is a *travesty*.

My research over the past seven years suggests convenience stores have twice the inventory required to meet customer service levels. In the average convenience store that adds up to $30,000 (at cost) of excess inventory. If you have twenty stores, you've probably got $600,000 invested in products that will not turn a profit no matter how long they sit in your stores. Even more compelling: If it were replaced with items that sell, your profits would skyrocket. Just look at this one simple example:

Let's say you replace the excess inventory of only one overstocked item with a product that turns five times a day

and produces a $0.50 gross profit. It adds up to $912.50 a year. If you can do that with 2,000 products, it adds up to $1.825 Million in additional profits.

No matter what figure you put to the equation, the results are impressive. What would only 10% of that figure do for those stores? How about in fifty, 100, or 1,000 stores?

Is there a 'perfect' JIT environment or service available for small to medium-sized retailers? Maybe not. But overlooking the possibilities of these kinds of tools doesn't make sense to me.

The weak link in SCM can be found in the way your supplier controls *his* inventory today— a process over which you have virtually no control whatsoever. The best way to explain this is with a situation we encountered years ago while working with several different suppliers:

Most suppliers' inventory control systems were not designed to track unique items. They buy inventory in lots that are assigned unique numbers which they alone provide. The reason things started this way is simple to explain but defies all reasoning as to why it continues:

Items come in different sizes— pallets, cases, cartons and units, even colors, styles and flavors. To a supplier, a single number such as '234567' may identify the same item in an array of different sizes. They use words like 'cartons', 'cases' and 'each', which have little or no real meaning in a computerized inventory control system. A perfect example of this is with cartons and packages of cigarettes. Additional problems occur when suppliers have cases of items they will sell a minimum number of units out of.

To make things worse, suppliers may substitute one item for another when they're out. We first noticed this years ago when a supplier continuously swapped one brand of air freshener for another. The two different products looked almost identical, but they were not, **and neither was their cost**.

In a supplier's warehouse, items are often stored in bins. One day, an item identified from bin '234567' might be Libby's green beans, and the next day it might be Van Camps green beans. In fact, it might become Del Monte lima beans overnight.

To add to the confusion, in many instances, convenience stores do not sell what they buy. They may purchase a box of twenty-four candy bars and sell the candy bars one at a time. The identifying code, the Universal Product Code (UPC) on the box, is different from the UPC on the item.

But, I'm getting ahead of myself. There is plenty of time to get into the nuts and bolts of SCM and JIT in the pages that follow.

Working for thirty-two years with hundreds of customers having thousands of convenience stores between them, I couldn't help but take note when specific actions taken and certain policies executed had good or bad outcomes. When I see something I have never encountered before, I immediately ask myself, "Have I seen this before? What is it leading towards? How can I convince them to change?"

The past seven years have led to an epiphany with respect to my line of thinking. I think it will later be proven that I stumbled over these ideas rather than discovered them. Mystery writers would call it the 'smoking gun' or even 'the elephant in the room'. I have observed the relationship between people working in the stores and those working in the office as being separated by a wall of diametrically opposed reality. When I find an entire shelf of inventory covered by a layer of dust, I make the mistake of thinking, "surely the owner of the company knows this stuff is here."

I'm not advocating one 'perfect' system over another. It's enough for me if you just read this material and use some of it (or all of it) to make your business more

profitable. I will be happy to correspond with you if you need clarification about certain sections of this book. You don't even have to reveal your identity. You can write to me anonymously if you wish and I will be happy to answer your questions as time allows. My contact information is located in the front of this book.

Maybe you are curious about the best way to implement a specific idea, how you can go about building it yourself within your own organization, or maybe I can help you work with your suppliers. It doesn't matter. I work seven days a week and am usually available at any time.

If you turn this book over to your Information Technology people, it will most likely be the end of it. This is not in the best interest of IT. It's in the best interest of management seeking ways to improve sales, profits, and increase customer service level.

Note: In a recent conversation with an employee of a large grocery supplier he said, "We conducted a study on the feasibility of this kind of system two years ago and came to the conclusion that our sales would increase by twenty-eight percent."

I think that figure is low, I'm aiming for an increase of forty percent during the first six months and a decrease in inventory of fifty percent or more in the first ninety days in one simple step. Readjusting retail prices to maximize profits and guarding against inflation should account for more, and employee grazing should drop by ninety-five percent almost immediately.

There is no such thing as a *safe assumption*. If your company is like most, many of your employees, trading partners and associates are attempting to work together with conflicting ideas about various issues— JIT and SCM being only two of the issues that do not have iron-clad explanations.

As you will see later, conflicting assumptions are like log jams in a river, hampered by misunderstandings at various levels, slowing down a company's progress and

damming it up, bringing programs to a standstill and derailing projects before they even get started.

Last week, I spoke to a store supervisor who literally fell out laughing when I suggested a change in the way stores are audited. But, putting myself in her shoes, with the knowledge she had to work with, I could see it as an example of how someone would have reacted during the civil war if I had suggested cell phones, television, space flight or nuclear weapons.

Not everyone has the ability to think outside the box. If they did, everyone would be an inventor. As a rule, most people do not see a problem as being an opportunity and they never will.

Every company has goals, objectives, problems and processes to conduct business and get things done. *Change* can be terrifying because it threatens jobs, careers and the ability to perform one's work.

If you have an IT department, you are likely to get resistance regarding many of these ideas because I advocate a scaling down of IT. In your current environment you may consider this notion ludicrous. But if I can show you how others are doing just that it will make a lot more sense.

Why am I certain it will help you? Because that's precisely what I did for my customers and any one of them will tell you, it made a huge difference in their cost of data processing. Also, there are outsourcing alternatives you may be able to take advantage of, providing identical solutions for a lesser cost of what you're paying now. Notwithstanding our own outsourcing services, 7-Eleven has a contract with HP Enterprise (formally EDS) which performs many of the services I am talking about. It's highly restrictive because it is designed to help 7-Eleven, not the independent franchisor that has to use it.

You must give up the notion that "everything is moving toward Microsoft" because it isn't. As you scale down IT in favor of sharing data processing costs in an environment that is supported by many businesses just like yours, while

still retaining the security and uniqueness you bring to the market, old assumptions will fall away and your profits will explode.

Also, outsourcing may provide advantages other than lowering costs, such as putting you on a more level playing field with your customers and suppliers and eliminate the sea of differences between their technology and yours.

Before investing the next dollar in anything regarding computer technology, stop and think: How can I share the expense with others so I don't have to bear the entire cost? What role does the Internet play in my thinking?

Thank You, John!

The next time you buy a loaf of bread, think of John Holbrook. He's a guy in Richland, Washington working on new ways to fertilize wheat crops. For consumers the supply chain goes no further up the chain than the retailer where they buy their bread. Without men and women similar to John, bread might be a lot more expensive.

I don't know John and I hope he doesn't mind me mentioning his name, but John is one of the thousands of unsung heroes that have an effect in the supply chain with regards to bread.

The retailer's supply chain starts with his wholesale distributor, where the money generated from the sale of a single loaf of bread filters down to pay the scores of employees that manage the stock, pay the bills, sweep the floors and to the driver who trucks the bread from the warehouse to your stores. The driver has to have fuel for his truck. The machines run on electricity. If there's a baker involved, he adds another link to the chain, the guy that delivers the grain to make the dough… yet another.

Then there's the ancillary links like the printer that prints the wrappers on paper supplied by a paper supplier, the supplier that sells the yeast to make the loaves rise, and so on and so forth— all the way back up to John, who at this moment knows even less about you than you know about him.

The retailer deals with the supplier, the supplier deals with the manufacturer, etc. etc. The end of the retailer's supply chain happens when his customer buys the bread and takes it home. What's happening in your stores at this very moment is affecting everybody in the supply chain, all the way back up to the line, all the way back to John and farther still.

We see the effects of the supply chain in every loaf of bread we consume. The North Dakota Wheat Commission reported in 2008: it takes about twenty cents worth of

wheat to produce a single loaf of bread— and it's going up. Your customers experience the increased costs of wheat at the check-out counter. There are other costs spread out over energy, transportation, bakers, advertising, marketing, printers, packaging, wrapper manufacturers, labor cost… all the way down to the little twisty that holds the wrapper closed.

Back in 2008, the twenty-cent figure mentioned above was approximately 13% of the in-store cost of a loaf of bread ($1.50). The other 87% came from all the other links in the chain. These costs are not fixed as there are opportunities to reduce costs at every step. For example: Walmart works closely with manufacturers and suppliers to streamline their manufacturing and delivery processes, resulting in lower costs to their 'common customers'. There is opportunity to work at every level of the chain to reduce costs and large retailers know this.

If information regarding a single sale makes its way back up the supply chain, farmers, producers and manufacturers are able to use the data to forecast needs and make plans for the future, while the cost reductions of accurate planning filter back down to you the retailer.

If the supply chain indicates a shortage of bread from one manufacturer, retailers can make plans to acquire similar products from alternate suppliers, increasing customer service level and preventing your customers from going to other retailers and chancing the possibility they might be lost to you forever. If you know ahead of time that prices on certain items are likely to rise, you can prepare for it instead of being forced into reactive modes of actions to deal with it when there's no time for planning on your part.

A convenience store's common profit denominator is a penny, not a dollar. Volume turns pennies into dollars. Every single item in a store should be there for the purpose of generating as many pennies as possible. Either it produces a

profit on its own, or it causes profit to be generated on sister items.

There's another side to this coin. A product might produce a loss, or cannibalize a profit-producing item next to it. Even if it just sits there smiling pretty, you're paying rent on the space it occupies.

If you owned 100 rental properties, how many would you allow to be occupied for free? Most real estate investments are made up of income producing properties. You wouldn't invest in them otherwise. It really doesn't matter whether the size of the investment is three acres or three inches.

The profit or loss generated by a single convenience store sale doesn't happen until a customer walks out of your store with it safely tucked under his or her arm. Getting the product from the shelf and into the customers' hands and up to the cash register is dependent upon hundreds of different factors.

Customers buy a multitude of different products for as many reasons. Most convenience store products are bought impulsively, so customers aren't as sensitive to the price as they are when shopping at the local Walmart. But that doesn't mean it's not on their minds.

Yesterday, I saw two elderly women in a Purvis, Mississippi convenience store discussing whether they should buy a 69-cent candy bar or a 79-cent candy bar.

It's a sign of the times. It made me wonder, if they were that price conscious, why didn't they go over to the *Dollar General* down the street? Maybe they were buying gas. Maybe it's because they were just there at the moment when one suggested they buy a candy bar. How important is the sale of a single candy bar anyway?

If you owned one store and the only product you had to sell was one, single candy bar, it would mean a great deal to you. Every day you would straighten out any crinkles in the wrapper and display it in a position of prominence where it

couldn't be missed. You would keep your eye on it so that no one steals it and investigate every avenue of putting the perfect price on it to produce the highest profit. You would do a lot of things, but one thing you would not do is throw it in the bottom of a box of mouse droppings and forget about it until it suddenly disappears and you need another one.

If we handled each item as if it were the only item in the store, things would be a lot different. What's stopping us? Time! It is simply too time-consuming to manage products in this fashion.

I disagree. Look around. The technology exists today to manage that product as if it were the only thing you had to sell, so why aren't you using it?

Walmart has made a science of convincing customers into believing everything in Walmart is a bargain. It's not true. If a Walmart customer happens into your store, you can bet your bottom dollar they will buy only items that are absolutely necessary for the moment. It doesn't have to be this way. There are ways to compete with Walmart by doing things they can't.

Yesterday one of my salesmen had a conversation with a Walmart employee who said: *Even Walmart does not yet have a system that operates in this fashion. David and Goliath, Microsoft versus IBM immediately came to mind.*

You need to become the most important link in your supply chain. Without becoming actively involved you're like a boat in a hurricane being batted around helplessly with the prevailing winds.

In February 2003, an article in Progressive Grocer Magazine[3] claimed $40 Billion was lost each year due to supply chain disconnect. How much of that $40 Billion was lost in your stores?

[3] 'Data to" by Joseph Tarnowski

Oh, and don't forget about John. He's working hard on the west coast to help you make a profit. The least we can do is help ourselves.

Walk the aisles of your stores. Pick up an item you have never seen before and scream, "What the Hell have you done for me today?" Then think of the thousands of individuals that are dependent upon the sale of that small item in order to make their living. You, your employees, your supplier, their employees— all the way up and down the line. If the supply chain is broken, somebody's not getting paid.

Attention K-Mart Shoppers!

*There's a **Blue-Light K-Mart Special** on aisle six…*

If you were born in the United States before 1960, and you've never attended a K-Mart Blue-Light Special, surely you must have heard of them. As soon as the announcement came over the public address system, mothers and grandmothers would immediately stop whatever they were doing, spin their shopping carts around, and head for the Blue-Light like their skirts were on fire.

What happened to the extremely successful practice of surprising the customer with an impromptu offer to get a once in a lifetime chance to buy something for a fraction of its regular price? Walmart has their *Rolling-Back Prices* campaign, but honestly, it's not the same thing.

Whatever happened to K-Mart's Blue-Light Specials anyway? Well I'll tell you. It was a brilliant marketing program that was forty-years ahead of its time.

People react positively to pleasant surprises. Today, most convenience stores are more like libraries. People come in, browse for a candy bar and something to drink, present their credit card and leave. Unless something really bad happens, like a clogged toilet or a clerk with tattoos and nose rings waits on them, five minutes later you're not even a memory.

Question: "Why did you stop at XYZ Store?"

Answer: "Your gas was a penny less than the store across the street?"

Why not do something interesting? Stores that are located 100 miles from headquarters are as close as the nearest Internet connection. The Internet provides us with the opportunity to be everywhere at once, yet we continue to operate as if the technology doesn't exist. Why?

One word… PCs. Small, cheaper computers which promised to eliminate cost and increase profits have us locked inside of *PC Jail*. Promises of client-server computing

and networking have not come about and what have, have resulted in horrendous costs and a plethora of problems that have nothing to do with retailing.

Unable to seamlessly integrate with our trading partners as Walmart does, we have had to learn terms like EDI and XML with its expensive 'mailboxes' and computer programmers to tweak the parsing programs that allow PCs to communicate with mainframes. This is totally unnecessary, but it provides jobs for thousands (if not hundreds of thousands) of IT people necessary to keep the costly processes running.

You should be able to connect to your suppliers in the same way you connect to the computer in the next office. Won't it be wonderful when your suppliers and customers can participate with you in a common network? It's coming. Quicker than you think.

Back in 1978, when I started working with PCs, there was an expensive alternative called 'time-sharing'. It required costly leased telephone lines with ridiculous rules and procedures forced on us by 'Ma Bell.'

When I tell some of my younger acquaintances, you had to have Ma Bell come to you house and they charged you an installation fee and you were charged monthly to put an extension in your kitchen, the first question they ask is, "What's an extension?"

My first modem had to be acquired from and installed by the local telephone company. The box had an ominous warning about prison sentences for violating federal laws. "What's a modem?" If you were born after 1985 you may not know.

Back then, the cost to run a leased telephone line two city blocks hovered around $1,000 a month, completely shutting out small businesses from having any hope of enjoying the benefits of computers. If it weren't for exorbitant fees charged by a huge monopoly controlling a

tiny strand of copper wire and an even more expensive entry fee by IBM, Microsoft would have never existed.

PCs were born in a rebellious era of computer geeks and engineering types like Bill Gates and Steve Jobs who were frustrated by the likes of IBM, and they wanted to bring monopolies to their knees. The results are— another monopoly, just as bad, just as big, with far inferior technology to what we might have had.

In my good friend Robert X. Cringely's work, "Accidental Empires"[4], available in book form and DVD, he wrote:

When Gates said, "I want to be the IBM of software," he consciously wanted to be a monolith. But unconsciously he wanted to emulate IBM, which meant having a reactive strategy, multiple divisions, and poor internal communications.

IBM just couldn't bring themselves to give us the respect we longed for and they paid dearly… but so did we.

PCs were electrical toys alright. I, like many of my peers, built computers in basements and sold them to people whose primary reason for buying them was to impress their friends. They were called microcomputers in those days, and designed to do one thing at a time for one person at a time. Billions of dollars have been invested to make these machines emulate mainframes. Entire new industries have evolved to counter their propensity to crash and lose data on a regular basis. Just look at the things you have to add–on to protect against viruses, data loss, network crashes, Trojans and hackers.

For three decades, PCs have been struggling to match the capabilities of their big brothers and in the course of it all, PCs may have become cheaper and faster, and they *have* been instrumental in adding great value, but at what price?

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[4] ISBN 978-0887308550

With PCs come the problems that PCs bring. Among these are their inability to maintain backward compatibility and communicate seamlessly.

No sooner than the dust settles on the purchase invoice, the latest thing is already obsolete. In other words, we invest tons of money into a technology with the common characteristic of reinventing itself every eighteen months.

Today, every business using PCs is constantly in the process of upgrading and the frequency of upgrading incompatible, disparate systems have had a tremendous effect on the value computers bring to the market. We don't see these things because we have nothing to compare them to. We can't see these costs because they defy all attempts at being tracked as they are absorbed in our day-to-day operations.

If you had a car that broke down several times a week there is little doubt you would attempt to get it fixed, but if everybody's car broke down several times a week it would be accepted simply because it's better than walking 100% of the time.

A new technology has arrived that will lay waste to Microsoft. IBM failed to take notice of the possibilities of sales to small and medium-sized businesses in the mid to late 1970s, and Microsoft will likewise fail in their ability to control global networks.

The problem is, Microsoft didn't create the Internet. They don't own it. In fact, no one does. In 1992, President Bill Clinton signed a piece of paper that literally donated the twenty-three year-old Internet to the entire world. It was the poison pill that Microsoft had no other alternative but to swallow. The government would like to take the Internet back, but it's too late. It has permeated our lives so pervasively people will not allow it.

But here's the point: PCs were born in a revolution and created an anarchy— a decentralization of power. Its leaders are constantly at battle, and like all anarchies,

eventually it will lose its power and fail, and the tools of its destruction will be interconnectivity of individuals and institutions, education and enlightenment of society, and advancement of economic power and prosperity.

In the sixties, an IBM engineer was quoted as saying, "There is no reason why the world can't run on fifty computers." He was wrong, but not for the reason you might think. Actually he may have *overestimated* the number required. As the Internet continues to evolve, it is likely to be recognized as the one computer the entire world operates on with all the rest being data links.

I am not suggesting PCs don't have their good qualities. As limited desktop machines they will remain an integral part of the worldwide Internet. But the Internet has opened up a new era of computing that is far from reaching its full potential.

'Time sharing' has evolved into something that's being called 'Cloud Computing', and Cloud Computing will give the smaller customers more stable and much cheaper data processing capabilities, enabling them to do things they never dreamed were possible… like the ability to vary retail prices in real-time adding excitement and spontaneity to customers' shopping experiences.

Less data processing expense means higher overall profitability. Since computers will do most of the work, training time for operators will be all but eliminated. Employees will give up their jobs of pricing inventory and doing time-consuming paperwork to focus on working with customers, keeping the shelves cleaned and organized, thereby creating even more sales. Eventually robotics will take over the role of convenience store workers as they are doing in supplier warehouses today. We may not like the idea, but we really have no choice.

In a Cloud Computing environment computing power is available for a monthly subscription fee— you pay only for

what you use and you're not charged for the services you don't use.

Software sales will plummet as more and more companies make their move to Cloud Computing. Why would anyone even considering buying a system that would be outdated in eighteen months when you can rent something better, faster, more reliable and a great deal cheaper, leaving the maintenance and obsolescence worries to someone else who can do it for a fraction of the costs?

Cloud Computing (time sharing) is the catalysts that will bring down monopolies again, just as PCs brought them down in the early 1980s.

You need to prepare yourself for the onslaught of resistance. There will be a zillion and one reasons not to do it, just as natural gas companies fought electricity by claiming it was far too dangerous to be used in private residences. How many people said, "Customers will never accept pumping their own gas"?

The Internet is likewise being characterized as 'unsecure', 'dangerous', 'unreliable', and 'too expensive.' It will allow terrorists to hack into your precious data and expose your secrets right up there on line for your customers and competitors to see; this may be true, if we continue to rely on PCs, but it reality it's just an effort to slow down the progress of the inevitable. The futility of networking PCs will become apparent and they will no longer be the center of data processing. They will become the fringe.

Cloud Computing services are already available today and much larger companies have been using them for years. The only so-called hacking seems to be limited to PCs.

Need more storage? It will simply be there when you need it. Never again will a computer person show up in your office with a request to spend another $20K to buy stuff you bought years before.

In a Cloud Computing environment, services are billed in a form similar to your monthly electric bill. If you add a

store, it will be added to your monthly bill based upon a prearranged fee. Close a store and you will not be billed the following month. If you need a specialized report, paid technicians performing services for hundreds of other companies will simply create it in seconds and deliver it to your office printer for a fraction of the cost of maintaining a staff of your own programmers. Need to add a desktop to the network? Plug it into the Internet and go to work. No office networks, no system upgrades. An inexpensive PC, cell phone or data terminal will let you connect to the network and the rest is somebody else's concern.

Here's how Cloud Computing will happen:

Over a decade ago, preparing for the inevitable, companies with deep pockets and enormous resources, began building huge data centers all over the globe and connecting them to the Internet. They are growing so rapidly the EPA already has their fingers in the pie, estimating the amount of energy to be used by data centers by the year 2011 to be in access of 100 billion kilowatt/hours with the peak load on the power grid to be 12 Gigawatts.

Many of these data centers are operating at only 10% of capacity. There are so many of these centers operating today, they are getting hungry for business. Local company networks will become obsolete. You will use the Cloud's network instead. Stores connect to the Cloud forming the same network shared by the office. Suppliers connected to the Cloud are connected to you and your stores. By giving them controlled access you will be able to allow them to peer into your stores' inventory the moment before they load their delivery trucks.

Applications and data storage are being rented as 'Virtualization' allows them to share hardware resources, operating systems and computing capabilities. POS devices, which are nothing more than PCs with pump interfaces, scanners and cash drawers, will plug into Internet

connections, as do digital price tags, price checkers and flat panel displays.

This will make it possible for price changes to occur, on demand, within seconds, and announced over flat panel displays, echoed onto electronic shelf tags, adding a totally new dimension to K-Mart's Blue-Light Specials. Management will make decisions at headquarters that will have an immediate impact on pricing and sales.

As this technology extends outside to large, brightly lit wireless LED signs that will advertise, "Coca-Cola, 20 Ounce Drinks $.39", customers will forget about the one-cent per gallon price differential on unleaded gasoline across the street. An hour later a different product will be advertised. Repeat customers will return more often to take advantage of the current bargains. The stigma of high prices will evaporate from convenience stores and your customers will have something to talk about at their afternoon coffee breaks.

Does this sound like science fiction? What if I told you, you could start doing most of this by the end of next week?

Category Management Deficiencies

WIKIPEDIA defines Category Management as *a retailing concept in which the range of products sold by a retailer is broken down into discrete groups of similar or related products; these groups are known as 'product categories'.*

Category Management is a method of accounting for inventory in an environment where item level control is impossible. Since the beginning of retail, stores have grouped items by category, mainly for the convenience of their customers.

For a convenience store, this equates to predominately groceries, beer, and cigarettes. The practice of category management continues to prevail because most convenience stores can't track their inventory to a greater degree, and **it's killing them.**

According to a new book just written by an MIT Senior Lecturer[5], the author states: *40 percent of every company is unprofitable by any measure, and 20 to 30 percent is so profitable that it is providing all the reported earnings and cross-subsidizing the losses. The rest of the company is only marginal.*

He could be talking about convenience store categories, because according to my research, it is exactly the way categories are performing.

When most items in a category were profitable, retailers were content with this form of control, but as category profitability becomes questionable, with only 20%-30% of the items within a category carrying the load for the

[5] Jonathan L.S. Byrnes, "Islands of Profit in a Sea of Red Ink" (ISBN 9780670919567),

rest, it's time to abandon *Category Management* for a more profitable alternative.

Suppliers prefer you continue on with *Category Management* because if takes your eyes off the items. Associations receiving large support from suppliers, continue to find new ways to keep your interests along these lines. This is *not* helping you.

Using Jonathan Byrne's figures, if you have 1,000 items in a category and 700 to 800 items are producing little or no income, how can you expect a store to make a decent profit all-around? Doesn't it suggest taking a closer look at what's inside those categories?

Recently I posted the following article in the Convenience Store News Magazine discussion group on Linked In:

Having real-time data provides opportunities to solve problems and have fun doing it.

A few years ago while counting items in one of our customer's stores, I noticed what appeared to be an out-of-balance situation involving Ben & Jerry's NY Chunk and Cherry Garcia ice cream. So, I looked through the data and here's what I discovered:

The store sold seven pints of NY Fudge Chunk per day. They had twenty-two pints left in the freezer. Odds were they would run out before their next delivery. The same store sold 0.2666 pints of Cherry Garcia per day and had thirty-five pints in the freezer- enough to last 131 days.

If the supplier had swapped 121 days of Cherry Garcia for five days of NY Fudge Chunk, he would have delivered the same number of pints, but the store would most likely have sold more pints in all resulting in higher profits.

Maybe customers were tired of buying 131 day-old Cherry Garcia? Who knows? The point is, the driver doesn't possess this knowledge or the inclination to care one way or the other. He comes there simply to unload his truck and leave a bill.

Now here's the funny part: In a store located a few miles away in the same general area, the situation was reversed, proving stores in different neighborhoods may have an entirely different market to sell to.

It's little things like this that stand in the way of convenience stores making a decent profit.

When products are managed by category, it's impossible to notice problems such as the one above. Without the proper tools, the vast quantities of data coming from POS systems make analysis spotty at best. It takes too much time… so nothing gets done.

In this particular store's environment, ice cream was grouped in the *Grocery* category, so the loss of sales I talked about was disguised by the overall performance of the Grocery category. This store had 4,000 unique items in stock. It makes you wonder how many additional products are affected by situations like this… 1,000? 2,000? More?

If you have automotive products in your store you might be surprised to learn there is probably enough dust and dirt on those items to start a vegetable garden. I would reduce those categories by at least two-thirds and put something else there. As it stands, electric window motors for 1979 Lincoln Continentals would perform equally as well.

In one store I uncovered enough Orbit Wintergreen chewing gum to last for three years, and the supplier was bringing another box with every order. When replenishment is based on past deliveries, you get stuff like this. It happens all the time. It's happening right now in your stores.

I found one store that had enough Laffy Taffy grape candy to last for 1,000 days and enough of one particular brand of beer to last for ninety days. The beer was blocking the floor in the cooler and preventing employees from restocking the racks. Broken glass and slimy floors made the coolers hazardous, yet somehow, cola suppliers continued to cram inventory into them which could not possibly be

sold before the next delivery… cases stacked five high and damaged cans littered the area. Erecting shelves along the walls lessened the problems for a while, until drink suppliers figured out how to make use of those as well. Paint a picture of a door at the far end of the cooler and cola vendors will stand there for hours trying to get in. I guarantee it.

I was working in a store several years ago when a well-known drink vendor came through the door with an eight-foot train of soft drinks. The manager rushed to the entrance and said, "I don't have anywhere to put this stuff," and the driver responded, "The pre-salesman told me if you didn't accept the entire order, I was to *bring it all back*."

Where does the arrogance come from that prompts drivers and pre-salesmen to resort to extortion to force you to buy products you don't need and can't possibly sell? *But it's okay. My deal with them says if it doesn't sell they will take it back.* Come with me. I can take you into any store in America and expose that ridiculous assumption.

Recently in another store I ran across a stash of cigarettes the supplier had promised to pick up a year ago. I gave them a gentle squeeze and they crackled like potato chips. Back in the store room there were thirty five copies of its siblings. They're still there, and the chances are they will be there next year. Why? Because the store manager is the only person that knows about them and she is tired of asking to have them removed. The fact is, nobody really knows they're there and eventually they will make their way to the dumpster where thousands of dollars of unsellable merchandise you bought with hard earned cash has previously been interred.

Too many stores have rat-gnawed candy and boxes filled with mouse droppings. Overfilled shelves allow candy to fall onto the floor. *Another box? Well, let's just shove in under a box that's already here. Not enough room? Be more creative in your stacking.*

In some stores I find so much redistributed chewing gum that I could swear there's a sign at the front door that says, "I've secretly hidden a $100 bill under the gum. Finders keepers!"

Lately, the appearance of new products has been disturbing. How many ways are there to market the same soft drink? There's eight-ounce drinks, twelve-ounce drinks, sixteen-ounce drinks, twenty-ounce drinks, twenty-four ounce drinks, one-liter drinks, two-liter drinks, twelve packs of eight-ounce cans, maybe two, twelve packs glued together… what's next, twenty-eight ounce drinks? Maybe there already is. I haven't seen them yet.

Has brand X already caught on? I can assure you it's only a matter of time. *Is anybody paying attention?*

Has anyone ever seen a customer carry four two-liter bottles out of the store without a grocery cart? I am pretty sure if you stocked cans, twenty-ounce and liters, it would be enough to meet customer service level. Isn't this just another carefully crafted plan to take over more of your cooler space? How many flavors of beef jerky and pork skins are possible? Apparently there is no limit.

You can't manage what you can't see, and not knowing what's in your stores is responsible for a great many of the losses in the industry today. Sometimes I think store owners don't want to know what's going on in their stores because they believe the problem to be so huge it would take a year to clean it up, and then it would simply happen all over again. Overstocked, unsellable merchandise has become invisible… until an employee falls over it and breaks a wrist.

I'm going to continue to hammer on the absolute necessity of knowing *exactly* how many days of product you have of every single item on your shelves, because not having that knowledge is a slow poison that is making your stores sick. While Category Management may serve a purpose, it's killing your ability to manage your inventory

properly, causing clutter in your stores, confusing your customers, and adding to your losses. Only by knowing the real-time disposition of items can you make informed decisions. There's no wizardry to this. It's not rocket science. Anyone can do it. And it can be done inexpensively.

Look at the following chart. There is simply no comparison:

Capability	Category Management	Item Level Control
Purchase Price	No	Yes
Date of arrival in store	No	Yes
Date of Sale	No	Yes
Profit on sale	No	Yes
Day's left	No	Yes
Turnover rate	No	Yes
Exact disposition of item	No	Yes
Variable pricing	No	Yes
Quantity on shelf	No	Yes
Retail price	No	Yes
Effect on other items	No	Yes
Accurate theft analysis	No	Yes
Remote price modification	No	Yes
Seasonal price changes	Difficult	Automatic
Comparative analysis with other stores	No	Yes

Referring to the chart above, we can see the differences between category management and Item Level Inventory Control:

- Purchase price— you may know what your last costs was, but what's the true cost of the product as it stands today? Items capable of producing a profit of 30% in January, if they're

still selling in December, you may be selling them below cost.

- Date of arrival in store— You might have to go through reams of purchase invoices to figure that out. Still, you would be hard pressed to get an accurate answer.
- Date of Sale— When was the last day a product sold? Could it be you're out? Is it dead? If the product suddenly stops turning someone should go and investigate. There's always a reason.
- Profit on the Sale— Unknown. Without a true cost figure it's nothing more than a wild guess.
- Day's left— Will you miss two days of sales each week, or have you bought more than necessary?
- Turnover rate— unheard of in the convenience store industry, but probably one of the most valuable pieces of information you should be able to put your finger on instantly. If the turn rate is changing your manager needs to investigate. If it's going down, something that's fixable might get it back to producing as it should. Maybe it's being cannibalized by a new product that's producing a lesser profit. If the turn rate is increasing, maybe you've run out of a competing product that was producing a greater profit overall. Computers can alert you to this information without someone having to go to the store and look.
- Exact disposition of item— Knowing the performance history of an item helps you make decisions on whether you want to discontinue it, market it more effectively, or move it to a different location.
- Variable pricing— Who says convenience stores can't do this? It's made Walmart billions. Price variations can be used to run experiments to

identify the correct selling price and/or to create bargains and excitement in your stores.

- Quantity on shelf— Knowing the exact number of units on the shelf at any moment in time allows you to alert your supplier when you're running low and prevents deliveries of more when you've got enough.
- Retail Price— If you can recall the retail price of an item, chances are it hasn't changed in a year and all stores sell it for the same price. Every item has a correct price for the specific store where it sits. An extra penny or two here and there can make a store profitable when it's not. How close is the store to a supermarket? What's the average income of the neighborhood? If it's an ethnic product, is there a large majority of a specific ethnic group in the neighborhood where the store is located? Is there a sports field near the store in its part of town? Is it located on a freeway?
- Effect on other items— How has the introduction of this item affected sales of other items?
- Accurate theft analysis— Your store just had an audit. The grocery category is short $1,000. What items were stolen? On what shift did the thefts occur? Do your employees sense they're being watched?
- Remote price modification— Priceless! You're sitting at home watching TV at 9:00 PM. You're reminded of something you have been meaning to do for weeks. *Get some of those blankety-blanks out of the store.* You go to your computer and change the price of the item instantly, a message is simultaneously emailed to the store manager and you're done with it. Or, you wonder if lowering the price of an item will

increase its turn ratio. You make the change from your hotel room using your cell phone. When you get back to the office on Monday, you check the turn rate and see the effect.

- Seasonal Price Changes— Let the computer do it. Set it up months in advance and forget about it. The price will automatically change at the date and time you specify and switch back after the holiday passes.
- Comparative Analysis Across Stores— Imagine being able to run analysis across stores in real-time and use the information to redistribute inventory and modify Preferred on Floor levels for each of your stores without leaving your office.

These and other possibilities come to mind when operating in a *Cloud Computing* environment. It will change the way retail businesses operate and it's less expensive than what you're doing now.

I recently read an article from the New York Times dated November 9, 2010, in their *Business Day* section where Tom Shaw, the head of Anchor Blue claims to have increased foot traffic by seven percent and sales by twenty-three percent by putting up a wall and reducing the size of his store.

The writer, Stephanie Clifford wrote, "Anchor Blue is among a growing number of retailers thinking small — chopping off big chunks of stores or moving to more efficient spaces. The change reflects two trends in the retail world: **Chains looking for new ways to cut costs in the sour economy, and consumers demanding a less sprawling shopping experience as they spend with greater purpose**."

There is a growing concern in the retail industry that customers enter a store, find the array of products overwhelming, get confused and walk away buying nothing.

Anchor Blue solved their problems by decreasing the size of the store and eliminating slow-moving products.

Now this may be a stretch comparing a convenience store to a clothing store, but think about it. Do we not have the same clientele?

I was scanning inventory in a convenience store just last week, where a woman took five minutes to make up her mind about what flavor of soft drink she wanted to buy. Could it be she had 'Anchor Blue' fever? At any rate, I can promise you she didn't purchase what the operator wanted her to buy— the product with the highest return rate.

Look at the following statistics. If you have 3,000 items in your store (average):

1. **30-40%, as much as 1,200 items are not showing a profit.** Some are even being sold below cost. That adds up to as much as $24,000 invested in the wrong stuff.
2. **0f the 1,200 items just mentioned, as many as 450 are simply DEAD.** At least they are not being sold below costs. They're simply DEAD and costing you money by taking up space 'profit producing items' could occupy. **This adds up to as much as $9,000 at cost.** If you have ten stores, $90,000 worth of inventory would serve you better if it were buried in your back yard.
3. **20-30%, as much as 900 items are selling so well they absorb the losses of the other 70-80%**, to the point it appears you are making a small profit.
4. **30%-40% of your stock is priced too high**, giving your customers the impression they are paying a penalty for the 'convenience' of shopping in your stores. If you would **lower their prices** to be competitive, you would **increase your turns** and

move more of it. While realizing an overall profit increase, you would appear to be giving your customers everyday low prices, crushing your competition and emulating the world's largest retailer.

5. **You have twice the inventory needed to meet customer service levels.** If your stock was reduced to 10-11 days, **your sales would increase by 40%** allowing you to double your product lines or operate in half the square footage.

These problems cannot be resolved in a Category Management environment, I don't care how many reports you have laying all over your desk.

Yes, we can see what we bought from the supplier invoices, and yes we can see what we sold from the cash register reports (that is if you are scanning your sales), but how many of each item is currently on your shelves, what their turn rates are, and how many days of those items are left remain a mystery.

With a real-time, perpetual inventory management system in place, you can resolve these problems in one month, two months maximum, and you need to start taking action immediately. Here's my simple recipe:

1. Get rid of your dead inventory
2. Reduce your stock to just the items needed to meet customer service level
3. Lower the retail prices on high margin items, increasing their turns and realizing an overall increase in profits while giving your store the *appearance* of offering everyday low prices.
4. Start saving a ton of money by getting rid of junk you don't need.

We have to do something about the mess in our stores. Do we really need 150 doo rags, bandannas and baseball caps hanging off of display racks and littering the aisles? Do we truly need enough cigarettes lighters to burn down Yellowstone?

If you would go out and spend one week in your stores you would do something about this, I'm absolutely sure of it. But, as long as you leave these decisions up to suppliers and confused store personnel, things will continue to worsen. So the answer is to bring the store into your office, pay, rent, or kidnap one person to sit at their desk and analyze the real-time data streaming in from over the Internet. These problems will not fix themselves.

Cigarettes and Tobacco Products

Six years ago, while converting one of our early stores to Just-In-Time inventory control, I had a young man from Russia working for me. One day he noticed Virginia Slims sales were flat, moving at what he felt was an abnormally slow rate. So he did a little investigating.

The Virginia Slims were at the bottom of the rack, a place where cashiers normally set their purses, cokes and whatever they happened to be eating at the time. He looked in the computer and he found a Marlboro item that was just dead. It hadn't moved since we started tracking the inventory.

So, he swapped the non-selling Marlboro brand for the Virginia Slims, and sometime later he looked in the computer and saw where three packs of Virginia Slims had already been sold since he made the switch earlier in the shift.

About that time, the store manager saw what he had done and had a coronary right there behind the counter. She scolded him about moving the Marlboros and gave him a good lecture regarding the 'cigarette police' and how they might come into her store at any moment and cancel her contracts, costing her her job.

Is there any better evidence of who is controlling your stores? Of all the cigarettes you sell, most likely ten percent are actually selling and producing a profit. I often wonder about the value of cigarette rebates. I know… it's nice to get a check from the tobacco companies, but have you considered what you are giving up to get those checks? I wonder if you discontinued the items that nobody buys and recovered the space for items that actually sell and produce a profit, would you be better off?

If the suppliers are controlling your stores, why aren't they paying your bills?

Value of An Item

This chapter begins with a simple equation:
Turns * Margin = Profit.

In too many stores today, the variables 'turns' and 'margins' are ambiguous. Unless you pour through POS reports daily and transfer the data to a spreadsheet, you may have no way of accurately determining turns, and margins are changing every time you receive an order. The point is, without having both figures at your fingertips you will never know how much you're earning or losing on an item.

Margins are determined by the moving-average cost of individual items, not by mark-ups. The actual cost of a candy bar may not be what your supplier charged you today or even last month. Since candy bars (or anything else for that matter) are not serialized, a convenience store operator has no way of knowing whether the candy bar he sold today came on a shipment he received last year or whether it was received from his supplier that very day.

The only way to accurately track the cost of an item in your store is to average its cost with identical items that were on the shelf when the new items arrived. So, if you had thirty items on hand with an average cost of $0.49 each, and you receive twenty-four more at a cost of $0.51, the true cost of each of the identical candy bars in that particular store is ((30 * $0.49) + (24*$0.51)/54) = $0.49889 each, and in order to maintain a constant 30% profit magin, the retail price of the candy would have to be adjusted from $0.70 to $0.71.

I will bet my bottom dollar you find the idea of raising and lowering prices by a penny to be absurd. When the only tool you have is a hammer, every problem looks like a nail. One penny may seem like a small insignificant figure and the manual labor needed to handle situations like this appear too costly to make a difference, but the availability of new

technologies coupled with the sheer volume of inventory in your stores changes everything.

With the average turn rate in convenience stores being as low as eight turns per year, we have a serious problem from the get-go. **Why is this figure so low?**

It's low because you have stuff in your stores that has been there forever and it's not turning at all. It creates unsightly messes that lower your stores' image and prevents you from replacing them with items that will produce a profit.

Do the math. If the average turn rate were increased by one a month, that small improvement could add 50% additional profit to each store's performance.

What causes this situation?

Suppliers putting stuff in your stores that will never sell, much less produce a profit. And remember, having excess inventory is the same as having bad stock.

Is it the supplier's fault? Well not entirely. You can't expect your suppliers to have the knowledge or time to know what's selling in your stores. They are pretty much limited to going by what they are delivering every week, and if you accepted a carton of something on the last delivery, you will most likely accept another carton of the same thing on the next delivery. That's precisely why I found 1,000 days of Orbit Wintergreen chewing gum hidden in a pantry under the cigarette display.

40% of the stuff in your store is not making you a profit. It's either DEAD or it's priced wrong— or it's turning so slowly it's a mistake to stock it. If you do nothing else but replace your 'dead' inventory with items that would sell, it's enough to **double the profits in all of your stores**.

If you find a dead item, get rid of it immediately, else somebody might actually buy some of it and make it appear the item is moving.

Why is everything priced to the 9th cent?

Label guns are suicide weapons, literally. Notwithstanding the inordinate amount of time it takes to re-price the stock, marking up everything to the next nine cents is costing you money. In order to price inventory correctly, it should be priced according to its absolute potential.

As an example, Paydays and Snickers are the same size, yet Paydays cost you less. Paydays turn at a rate of about 0.25544 per day. Snickers turns are up around 5.0000. Why are they priced the same? We could increase the turn rate of Paydays by dropping the retail price with respect to its cost and produce an overall increase in store profits. If a Snickers cost $0.79, you should start with a retail price of $1.13 not $1.09 or $1.19. If Paydays are costing you $0.70, they should be priced at $1.00 and not $0.99 or $1.09.

Warning: Be careful not to price a sister item to low, as it might cannibalize a more profitable item.

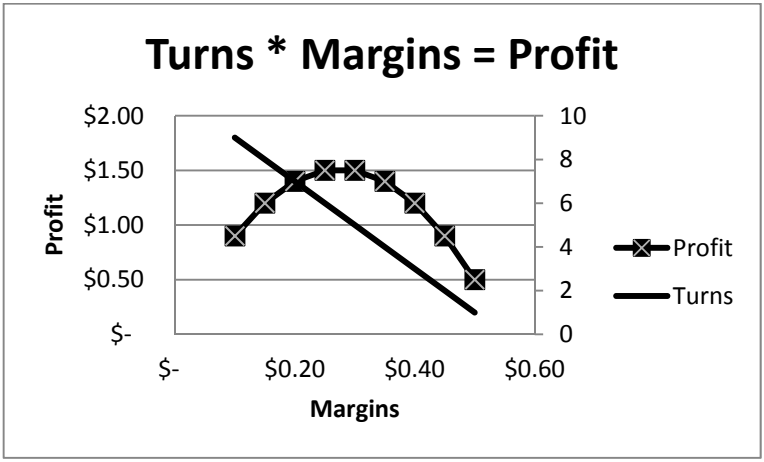
The next step is to allow the computer to monitor the turns on each candy bar and adjust the retail price for maximum profit. You might be able to lower the retail price and increase the turns and the profit. You may be able to increase an item's retail price, lower its turns and increase its profit. You might think that would take too much time. What's time to a computer?

I think I can walk into every store and find more than one pricing label on some items, sometimes three with different prices. Also, if there are ten identical items, chances are pretty good the ones in the back have an older price.

Just how powerful is the penny?

What if you could raise the retail price of everything in your store by five pennies? One single item turning five times a day would produce an increase in annual profits of $91.25. Ten items? $912.50. One hundred items… $9,125.00. What stops you from doing that right now? What would

happen if you were able to decrease the price of an item by a nickel and double its turns? Say from a profit $0.30 to $0.25 and from five per day to ten? From $1.50 in profits to $2.50. A 66% increase in profits. The problem is, in your current environment someone would have to go to the store to perform experiments such as these. In a *Cloud Computing* situation you could make the change from the office at 8:00 AM and check the results before you left the office the same day.



Study the chart above. By varying the margins on a particular product, we are able to vary the turn rate and affect the overall profit. In the above example, the proper margin for this product is between $0.25 and $0.30, because it will perform best when the turn rate is 5.5/per day.

The important thing to remember is the chart uses **the difference between** what we paid for the items and the retail price we set and **not** the cost of the product or the retail price directly. Marking items up by a set percentage according to category is a mistake because every product is unique and performs in a different way as margins vary.

This is a simple, but valuable chart consisting of only three variables, but an intelligent price book is required to

monitor and vary the turn rates in a store filled with 4,000 items.

My current hero is an operator by the name of Greg Parker. Parker is one of those oil jobbers I wrote about earlier, and he dived, head-first into the convenience store industry back in 1976. I read about him in a recent article written by Angel Abcede, appearing in the November 2010 edition of CSP Magazine.

Note: *Angel Abcede is arguably the best technical writer in the industry and I would advise everyone to read everything he writes… twice.*

Greg has taken the 'retail is detail' idea to its limits by doing things like tracking his cost down to kilowatt hours of electricity used to run his stores. Absurd? Not hardly.

In the article, Patrick NeSmith of McLane Co. says Greg *makes decisions on products based on profit per square foot*.

How has Greg Parker become so profitable? Hard work, microeconomics and endless experimentation, resulting in operating each store as its own model, making scan data more important than rebate money, putting a leash on DSDs, taking schedules out of the hands of store managers and giving customers wide aisles, clean lines and no clutter.

As Greg's technology continues to improve, he could easily become the *Sam Walton* of convenience stores. I would hate to be a competitor in his market.

Non-Competitive Cooperation

In 1986, Walmart called in their suppliers and unveiled Retail Link®— a system intended to dramatically reduce Walmart's costs and make Sam's dream of providing his customers with "everyday low prices" a reality.

Retail Link® caused a paradigm shift in the retail landscape and made Walmart the world's largest retailer. The costs were enormous, but so were the rewards. As a result, for over twenty-four years Walmart has dominated the retail industry while smaller, independent retailers struggle to survive.

There is an answer. It involves *intensive collaboration* between retailers and their suppliers and the tools to accomplish their mutual goals.

Non-competitive cooperation comes in many forms, from sharing the nation's vast electric grid, to meetings with suppliers and competitors for the mutual benefit of all. A prime example is the *National Association of Convenience Stores* technology forums and annual *State of the Industry* reports.

But it doesn't stop there. Local businesses meet on a regular basis all around the world to discuss ways in which they can exchange ideas and offer helpful suggestions. Social media such as Linked In and Facebook are rich with business discussions where competitors share ideas and discuss their problems and concerns.

A prime example of non-competitive cooperation is our global database of Universal Product Codes (UPCs). Almost every product marketed in the world has an eight, twelve or thirteen digit code affixed that absolutely, positively sets one product apart from another.

Most UPCs in the United States are marked with twelve digit codes:

In the above example, the first digit is called the *preamble* and references the item's size. It is rarely used in the United States, but it *is* included in calculating the last digit of the code, referred to as the *check digit*.

By running the first eleven numbers through an algorithm, a check digit is generated which represents the result of the calculation. The check digit has nothing whatsoever to do with the item's identification. Its purpose is to be certain the scanner has read the barcode correctly.

You may have been through a grocery checkout line where the cashier had to pass an item over the scanner several times before you heard the familiar beep, indicating the scanner read the bar code successfully. Unless the check digit matches the calculation created by the first eleven digits, there is no beep, indicating an unsuccessful read.

Eight digit barcodes are the shorthand version of the larger codes and primarily used to display a barcode on smaller items. Thirteen digit codes are ISBN numbers for books and non-US codes for other products. In the latter case, they were generally created to allow for a country code, but most likely they were created simply to be different than US codes.

As of this writing, a storehouse of universal bar codes does not exist for general access. There are a few companies that attempt to maintain such a database but they are commercial ventures relying on paying members to add

new bar codes as they encounter them. Consequently, they are both inaccurate and incomplete.

A worldwide storehouse of all UPCs is needed, but it will only work perfectly if manufacturers submit new bar codes and product descriptions as they are created.

In our system we have set up a universal database of bar codes for convenience stores, accessible by all participants in our network. Many new ones are added every day, but the advantage is when a new item is encountered by one of our customers' stores, the instant the item is created in our system all users of the network share in the same information.

Besides the barcode and name and descriptions of items other data is linked to the barcode and can be used to accumulate aggregate information about an item.

Before you accept a new item into your store, you need a way to determine the probability of it selling in your market else you are just a guinea pig for some manufacturer's experiments. A recent survey tells us that 80% of all new items do not sell. Let's put a stop to this kind of abuse.

When a new item is encountered in a store most likely it will have already been added by another store in the network so it is available to everyone, greatly decreasing the time it takes to set up a new item from scratch. We constantly monitor this database for errors. There will never be errors in the barcode itself because the check digit (see above) insures the bar code is a valid one.

Note: In a non-competitive, cooperative environment, information regarding new product sales can be shared in the form of aggregate sales' data for specific geographical areas.

When including barcodes on purchase invoices some suppliers have hi-jacked the check digit for their own use, which renders the bar code worthless. Some have dropped the preamble and report only the middle ten digits. If the preamble has been lost, the possibility of recalculating the

check digit no longer exists. *More about this bad habit in the next chapter.*

Suppliers do things like this because they know their convenience store customers use the supplier's code (not the UPC) to track purchases. But there is huge disconnect here. If people at headquarters are attempting to maintain redundant price books on a server, rarely having the actual item in their hands, it makes their job difficult if not impossible. In such a non-integrated environment incomplete and error-ridden updates to the POS device are transferred to the store periodically, not at the time when they are actually needed. This antiquated process is called *synchronization*.

Synchronization infers multiple copies of identical information are stored in different locations, making accurate and timely updates to the POS difficult. In such an environment, when a store receives new items the clerk has no alternative but to use the category keys to enter the retail price manually to process the sale through the system.

In a case where the store manager changes the price on the POS and the prices are updated from the office, who decides which prices are correct? Or maybe headquarters is contented with allowing the store to continue to sell the item at the wrong price until someone at the office has the time or inclination to download the new prices to the store.

Note: Synchronization has always been a problem and will eventually have to be eliminated entirely if the problem is to go away.

To update the pricebook on a new item, the person at headquarters has no alternative but to stop what they're doing and call the store to try to obtain a UPC. If they cannot get the information they need immediately, it's doubtful they ever will, so the cashier keeps jamming her finger down on the category key and retypes the price to make the sale every time.

Solution:

We designed our system so a store employee can scan the barcode on the new item when it is first received and enter the price and the category immediately. The item is added to the *global network* and the price is instantly transferred to the store's POS. No synchronization needed. As new stores receive the new item, they simply add their price and their POS is updated moments later. When the customer shows up at the counter with the item in hand, 'beep', and the correct price appears on the POS display.

Maintaining price books at the office and then transferring them to the store, creates ambiguous, hidden costs that cannot be attributed to the store. There is a better way.

Items routinely rot behind the counter until someone from the office decides on a retail price, or the store manager wanders in the next day and multiplies the cost by an agreed upon markup percentage of the category, grabs a price label gun, marks the new items and puts them on the shelves. The delay on getting these new items into service costs you money. I see new items every day, cluttering up space in storerooms waiting for a price.

Maybe your supplier suggests a retail price or the manufacturer prints the price on the item. How do they know what price is correct for that store? Every item in your store has a perfect price for that particular store. By reminding our customers constantly when a price is too low or too high, sooner or later they will make the change.

How do we know?

Simple: If the turn rate of an item is not consistent with other items in the category, it indicates a problem that may be solvable with a simple price change. If the turn rate is above normal, it indicates the price may too low. If the turn rate is too low, it may indicate the price may be too high. If the turn rate is changing in either direct, something is going on – cannibalization by sister items, cannibalization on

sister items, camouflaged or covered up, etc. At the least, store managers are advised to visit the item and see if there is any physical indication that would explain why a turn rate is changing.

There are a myriad of ancient procedures and manual systems that prevent you from working with your suppliers. Suppliers don't care because they assume you are happy with the way things are and have no interest in changing them.

Note: *There are real expenses here that have been absorbed in the cost of running headquarters, making your stores seem more profitable than they actually are.*

We can eliminate these 'mystery costs' by making available to all retailers, not only a central repository of UPC codes, but aggregate data regarding the performance of products we are expected to carry in our stores, *and* their availability across a range of suppliers.

Suppliers should get used to competing for your business. There is nothing to keep you from doing business with more than one of them, even if the costs may be higher, the net gains in profits might be far greater.

A convenience store operator recently told me he is buying a particular brand of cola from Sam's club because the cola distributor demanded seventy-five percent of his cooler space to give him a decent discount. Another operator related a similar story regarding cigarettes. If these instances are not a good indication of a system that is out of control, I don't know what is.

Suppliers fear if retailers have access to turn rates in their stores they will start eliminating non-sellable merchandise. They're right. What they don't know is filling the store with unsellable items confuses the customers, slows turn rates, and hurts both the supplier and their retailers. As a purveyor of your suppliers' inventories, they will soon come to understand it is not in their best interest to continue on with their current policies.

Ordering and Receiving

As I have said, suppliers, by and large, do not manage bar codes effectively. It causes many problems, none more troublesome than the parent/child relationship that exists between sizes of related products.

You may not sell what you buy, so if a barcode is maintained by the supplier at all, it is generally the item you buy (a carton of cigarettes) as opposed to the item you sell (the package).

In the instance of cigarettes you may buy cases and cartons and sell cartons as well as packs. But in some products like candy bars, you may buy twenty-four in a carton and sell only the single bars.

Parent/child relationships present other problems. For example, we have customers that buy cases of beer and sell six-packs while others buy cases and sell singles.

Since you do not always sell what you receive, you may not be able to order what you sell. Parent/child relationships solve these problems by having a table that relates children to parents (singles to boxes and cartons).

For example, you cannot order a single pack of cigarettes, so if you decide you want to maintain a level of 200 packages of a certain brand in a particular store, we have made provisions to handle both cartons and packs and make certain they are interchangeable.

300 packs of cigarettes on hand equates to thirty cartons. Every time a carton or pack of cigarettes is touched during a sale, audit or the receiving process, the parent/child relationship is immediately recalculated.

Using the previous example, our system insures the packs never fall below zero by internally converting thirty cartons to twenty-nine cartons and ten packs. The instant a carton is sold, the system recalculates the parent/child relationship to twenty-eight cartons and ten packs.

If a pack is sold, the computer resets the relationship to twenty-eight cartons and nine packs. When packs reach

zero, the adjustment program recalculates the inventory to twenty-seven cartons and ten packs, and so on and so forth.

In this case, when the inventory drops below nineteen cartons and ten packs (200 packs), the system generates and order for the minimum number of cartons that can be ordered from the supplier.

Note: The floor limit can be adjusted to reflect lead times while constantly monitoring turn rates to calculate day's left. There are seldom reasons why the volume of a particular product should exceed eleven days of selling time, including seasons.

From this point on, several things may occur depending upon your supplier agreement. The order can be used strictly as information, the supplier can peer into your stock (as a Walmart supplier does) and bypass the necessity of creating an order, or we can transmit an order to your supplier, delivered in any format the supplier prefers, for the required number of cartons.

After that several other things may occur. The supplier can immediately send a picking order to the warehouse or he can add it to an order that is to be picked on the day of delivery.

When the inventory is placed on the truck and the truck leaves the warehouse, the supplier can transmit a pre-shipment notification to our data center on the store's behalf, telling all parties involved to expect the inventory to arrive at the store the same day it is shipped. The supplier and the retailer can track the disposition of the order through the delivery and receiving processes.

When the items are received at the store and scanned by store employees the received order is confirmed, compared to the pre-shipment notification received earlier in the day and reported to the supplier and the store's headquarters including any discrepancies. This takes the possibility of driver-theft and undocumented warehouse picking errors out of the equation.

If all is well, the invoice can be booked and an ACH can be forwarded to your bank and the payment can be wired to your supplier's bank on the due date.

In instances when we are unable to get the cooperation of a supplier, we devised a scheme that works in situations such as those. When received, the orders are scanned in as above and an invoice is created at the data center which can be manually compared to the supplier's paper invoice for accuracy. In effect, we are doing the supplier's job for him. Then the discrepancies are reported to the office and the office can deal with it, or ignore it if that is their prerogative. At any rate the errors are logged and can be used the next time the supplier attempts to coerce you into buying something else you do not need.

Either way, the amount of inventory received is immediately added to the stock on hand, updates the moving average costs of the product and reports the effects on margins.

It also increases the number of days left of items and tells you if you're likely to run out before the next shipment arrives. It also reports if you have more than you need so it can be returned to the supplier or transferred to another store that is lacking the inventory needed to satisfy customer service level.

By using a simple PC in the store's office, a manager then views the items scanned at the point of delivery, is alerted to cost changes (both real cost and moving-average) that affect margins, may be allowed to change the retail price to accommodate the increase (or decrease) in costs, and mark the received order as complete. The invoice remains in our data center where it may be viewed or downloaded at headquarters, and optionally viewed and/or downloaded by the supplier.

In the past, I've found headquarters simply pays the invoice as too much time has elapsed from the time the

inventory is received and when the office pays the bill. No one knows how much money has been lost due to this method of doing things.

In circumstances where the invoice was paid out of the cash register as the items were received, errors on invoices usually go completely undetected.

Considers these figures:

- It cost $40 or more to handle a purchase order manually
- Sixty percent of all invoices generated have errors
- Forty-three percent of errors result in deductions
- Each invoice error cost $40 to $400 to reconcile

Supply Chain Disconnect

I suppose suppliers will have to lose more customers before they realize they hold the key to making the supply chain work. Suppliers need to realize convenience store retailers have very little use for the numbers vendors use to identify their own stock. If they would correct this one, simple, problem everything would get better.

The solution is so elementary sometimes I think there are other reasons they delay making the adjustment.

I perceive one of the suppliers' problems as being they do not want to give up their ability to substitute items while retaining the same supplier number. I can't figure out why this would prevent them from conducting business as usual. A simple table of substitutable items would resolve the issue. Everybody already knows they receive substitutions, so what's the big deal?

A simple table of all UPC codes linked to their respective supplier IDs, once set up could be maintained easily. The supplier's ID is only of value in locating the items in the warehouse. I fail to see the problem here.

In talking with some suppliers I sense a real fear of losing control of what goes into their customers' stores. Having a place to store your stock without having to get permission is a powerful incentive to leave things as they are, but we simply can't afford to allow this practice to continue.

If a convenience store operator could load up a customer's vehicle with what he wanted to sell him instead of what the customer came into the store to buy, I suppose the idea of a customer picking his own products would meet with a great deal of resistance as well. But that's not the way it works in retail… is it?

Auditing the Store

I'm not allowed to drive the train
The whistle I can't blow.
I'm not the one who designates
How far the train shall go.
I'm not allowed to blow off steam
Or even ring the bell… But
Let the damn thing jump the track
And see who catches hell !!

Category audits by third party auditors are much like going through Granny's bloomers at the airport. It causes a great deal of excitement, but produces questionable results. Employees get bored, and idle minds are the devil's workshop. Auditing the store's inventory is something they can do that will keep them busy.

Did you hear right? Yes, I said *let your employees audit your inventory.*

When I got started in this business thirty-two years ago, from somewhere operators had already come up with the idea*, if employees know what's in the store they will cover up shortages.* I can see how that kind of thinking may have seemed valid in the past, but with today's technology it adds up to an outdated assumption that needs careful re-evaluation.

Once I asked a store operator, "If employees are not supposed to know what's on their shelves, how do you expect them to order inventory when they run out?"

But it really doesn't matter anymore, because with a good item-level tracking system in place it is virtually *impossible* for employees to steal and get away with it.

Before 'fuel logs' tracking meter readings to prevent the back-reading of meters was all the rage. Once the stores were required to log tank stickings on a daily basis, tracking meters became unnecessary.

One of the secrets of keeping an accurate perpetual inventory is to maintain an on-going audit of every item in the store. This will require the use of store employees to do these audits and I recommend that all store employees be incorporated into the auditing process. It's simple, easy, and allows them to get a better sense of being an integral part of the overall process. Also, if you've been paying an outside service to have that done, you will save money there.

I think the effect third party auditors have on employees has caused more good managers to quit their jobs than anything else. It's like the old poem on the previous page.

Keeping inventory by item rather than by category, changes everything. By using the computer to enforce a strict routine during the auditing process in real time, operators will quickly realize that it is the only way to maintain accurate counts and will result in a far superior method of auditing the store's inventory than any other method being currently employed. But it has to be done correctly.

Our experience has shown, in an organized environment it takes approximately thirty-two man-hours to completely audit the average store's inventory, however when subsequent audits have occurred using our system, 85%-90% of the store's inventory is neither over nor short.

This accuracy is due in no small part to the methods we employ while doing these daily audits and cannot be compared to the inferior method of auditing inventory by category on a monthly or semi-monthly basis. Therefore, the answer to the problem of auditing many items is to concentrate on the 10%-15% that is high-risk and audit the other items once or twice a month.

Using the thirty-two man-hour figure as our guide, we can assume that the most time spent on high-risk items in the average convenience store should be no less than two-hours and twenty-four minutes per day. By requiring

employees to spend an additional twenty-seven minutes auditing low-risk items, the entire store can be audited in two weeks to a month. Therefore the total time that is spent daily on auditing the store is no more than three-hours each day.

Note: Three hours per day multiplied by thirty days equals ninety hours— much greater than the time it takes to audit the store because of the concentrated effort on high-risk items.

By breaking up the audit into three small shifts, daily audits are accomplished in three one-hour shifts or two 1.5-hour shifts. Our experience has also convinced us that there is ample slack time available during the day in which these audits can be carried out.

About High Risk Items

10%-15% of the items in the store are considered *high-risk*. Some people might say the cigarette category is one of them, but that's *Category Management* thinking. The truth is not all cigarettes are *high-risk* items. Some cigarettes in the cigarette bins are so unpopular that even employees won't steal them.

The system I developed provides a sophisticated set of computerized procedures running in the background, providing employees with information to identify *high-risk* items in the store, and using the data that comes from the audits to create the 'daily audit list' moments before the next audit process begins.

Employees are going to make mistakes when auditing their inventory. If mistakes are suspected the system will include the item(s) in question in the *high-risk* lists for the next audit. Surely we have no way of knowing why an item is short or over at the time the audit is made, but the employees don't know that, and by letting them know an item has been placed on the *high-risk* list you can bet the entire staff will focus on that item more than on items not on the list.

I first noticed this twenty-six years ago when I was installing a computer for a large truck stop when the owner came to me with an amusing story:

The owner's father-in-law was an elderly gentleman by the name of 'Burt', and Burt worked at the store doing odd jobs around the place and kept the parking lot and floors clean.

One day during the installation process, the owner walked into the store and a woman running the cash register asked him, "Mr. Kerry, y'all about to get that computer up an' running?"

"Oh, yeah," he said as he made a wide arc with his hand around the room. "We've put all this stuff into that thing and you know what?"

Two girls at the counter just stared… speechless.

"It says, there are two packs of crackers and a pair of work gloves missing."

*Without skipping a beat, the clerk behind the register announced, "**Burt got the gloves**."*

I hope you see the point. When the emphasis is place on items as opposed to categories, we have noticed employees are more apt to police themselves. "Did you pay for that candy bar? I don't want to get blamed for it."

Let your employees work for you. Good employees will revel in knowing you appreciate their efforts. Bad ones will be ostracized by their fellow workers and leave. If you don't care what's in those categories, neither will they.

Another advantage is if the Snickers keep coming up short, maybe they need to be moved to an area in the store that is less hidden from the store clerks? Whoever thinks about these things?

The "*High-Risk*" lists should be posted in the office or stockroom every day for all employees to see. To the employee that has stolen items before, being made aware of

the knowledge that headquarters is paying close attention to the item or items they have stolen will have a tremendous psychological impact on job security and thoughts of jail time. The threat of being caught is a powerful reason to be honest.

A Learning Process

The auditing process is as much a teaching tool as it is a tool for maintaining an accurate inventory count. The rewards are a cleaner, more organized work environment.

Employees become frustrated when items don't scan, are not correctly priced, or when customers complain they can't find items on the shelf. Employees will be encouraged to remember what's in their store and where it is located. Keeping the store clean and organized will make the auditing process much more enjoyable.

Employees will subconsciously put items where they can more easily be audited. If they get tired of looking for the Laffy Taffy next to the auto parts, they'll find a place in the candy area where it belongs. By the way— so will your customers. Picking up a filthy box of cereal that's been there since the store was first opened will prompt them to take action.

Each employee should be assigned a separate user ID and a password so the audits will be flagged with their identity. Items skipped during the audit process will be flagged and store employees should be made to explain why an item was skipped.

Employees will begin to appreciate they are an integral part of the overall business environment and they are being supervised as if they were working in an office at headquarters.

This doesn't take extra work on your part. Computers can do this for you.

Finding Items in the Store

I generally do my grocery shopping at a local grocery store. I guess you might classify it as a 'large' grocery store. Over the past five years of shopping there I cannot remember a single case when an employee could not immediately take me to any particular item in the store that I asked for.

If employees stand around behind the counter gossiping, talking about the latest NASCAR race, or discussing husbands and boyfriends (or wives and girlfriends) they are not earning their pay. Busy employees make productive ones. If they have come to the store to discuss the weather they don't need to be there.

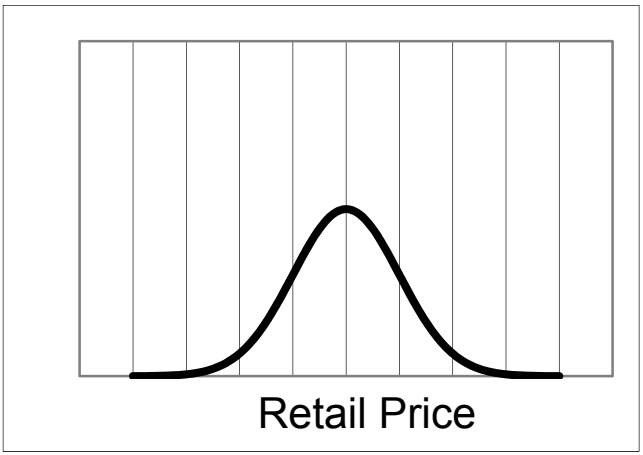
The auditing process is just challenging enough to attract the employees' interest, instill pride and confidence in their work, and take their minds off of personal matters, while putting the focus on customer satisfaction, store presentation, accuracy, and quality of service.

By increasing an employee's value to you, you also increase their loyalty.

The Perfect Price

Finding the perfect price for each and every item in the store will maximize profits and get better performance out of your categories.

Every item in your store has a value, even though it may be $0.00. In a Category Management environment, items are thrown in with the rest of the category and make it difficult to identify their value.



When the retail price of an item is raised, turns may or may not decrease. The converse is also true. Lowering the price on an item does not necessarily increase its turns. One of the greatest advantages of monitoring items instead of categories gives you many opportunities to find out.

By raising or lowering the selling prices of items, you can observe these changes in real time. The system can alert management when an item's turns are waning, indicating something may be amiss. Maybe the item is camouflaged by other items on the same shelf. Maybe a cannibal item is stealing its turns. Maybe you're out. Whatever the reason, you won't find out unless your computer is monitoring items.

Turns may be affected by the time of year, the day of the week, seasonal reasons and even the time of the day.

I recently performed and analysis of honey buns:

Sales of honey buns were strongest between 6:00 AM and 9:00 AM. There was a small bump at noon, and another at around 7:00 PM, but the rest of the time, at least in that store, sales were virtually flat. Yet, during those dead times honey buns continued to occupy valuable selling space in the store. It occurred to me, if the prices on these items were dropped in the afternoon the store might sell more honey buns throughout the day, resulting in higher overall profits and less stale products to be picked up.

Other things that affect value are the weather, local sporting events, holidays and seasons. Lowering prices during off-times creates opportunities for greater profits, and computers can be programmed to recognize and react to these situations.

70%-80% of the items in your store are not priced for maximum profit, 10%-15% of those are dead, and the remaining 20%-30% are carrying the load for the entire store.

But these decisions cannot be made at the store level. They should to be done from the office, in real-time, timely, and with as little error as possible.

Adjusting the prices to gather information, creating excitement in your store and maximizing profits are practices that are being ignored by almost all convenience store operators.

The fastest and easiest way to increase profits is by improving pricing policies. To set pricing for maximum profits it is critical to understand the effects of correct pricing in the store and on the supply chain.

Small price changes on some items may have little effect on turns in the short term but may become more apparent over time.

Large price changes have a more immediate impact and may be noticed immediately, say when lowering the price of a two-liter drink from $1.99 to $0.99. But you have to be careful the reduced price does not cannibalize more profitable items around it.

When drink suppliers and cigarette manufacturers drop prices by large amounts, they are trying to drive more of their inventory through your stores, but are they doing you a favor?

Promotions controlled by suppliers can actually hurt you. For example: New, promotional items thrown into a shipper to entice you to participate in a 'deal' may cause drops in sales of other items that were producing higher profits.

Keeping in mind price changes of some products may affect the sales of others, you may want to maintain a slightly higher margin on less costly items to prevent them from becoming cannibals. The point at which they begin to affect other items can best be determined by the computer. If you notice a drastic reduction in the turns of a profitable item, observe the turns of other items in the same category and identify the culprit(s) that way.

In summary:

Price changes can be used effectively to increase profits, but they can also have the opposite effect. Suppliers' announce promotions to move more of their inventory, not necessarily to increase your profits.

Inflation!

Look out here it comes! As of this writing I have recently received information of Kroger's announcement to pass along food-price hikes to consumers. Manufacturer's price increases are going up faster than they should, probably due to the threat of even greater inflation expected in the near future.

Suppliers' costs are going up too, and if convenience store operators don't start paying close attention to costs and adjust their retail prices accordingly, many may be eaten alive by inflation. Managing inventory by the item may very well become necessary for survival.

Current inventory management principals were adopted during times of price stability. The costs of new inventory should be merged with current costs and adjusted continually.

In order to remain competitive, when prices are rising your calculations should include existing inventory that was purchased at a lower cost. In times of deflation prices must be lowered faster to remain competitive, leaving even greater opportunities for uncontrolled losses.

As it stands, the majority of store managers do not take the time to notice price increases in time to stop losses. With margins on items already reaching all-time lows it won't take much to upset the applecart.

Sixty percent of supplier invoices have errors. It's difficult enough to catch their errors, much less watch for inflationary price increases. Maintaining a true moving-average cost for every item in the store and a means to monitor the changes occurring on profits is your only protection against losses.

Convenience store operators that have tools to monitor rising costs effectively will outlive their competitors.

Three Common Mistakes

The three most common mistakes made by convenience store operators today are:

- Not attempting to monitor inventory at the item level
- Allowing suppliers to control inventory replenishment
- Failure to maximize profits on every single item in their stores

Category Management is a poor alternative when compared to Item-level Inventory Control and the justification for its continued use no longer stands. There is a finite amount of space in every store. With some space allocated for the manager's office, a sales counter, storage facilities, and supplier deliveries, even less space is available for the actual selling process. To be successful, every square inch of sales space must be managed for its maximum efficiency and profit. Convenience store operators fail in part, because Category Management does not allow them to manage these tiny pieces of real estate effectively.

Convenience stores of the future will have smaller selling space and larger storerooms; or the same size selling space with lesser inventory, wider aisles and no clutter. Keeping smaller amounts of inventory on shelves has been proven to greatly accelerate sales.

Historically, cost containment has been a method of choice by most operators, and is tantamount to rearranging the furniture when the house in on fire. It's time for operators to take a different approach.

Try to think of every single item in your store as a **tiny little machine that generates cash** and the amount of cash it generates is dependent upon many factors.

If you had a manufacturing facility with ten machines and one was broken, you wouldn't waste time getting it fixed because it would shut down the entire plant. If you had 3,000 machines, the loss of one machine might be insignificant if the workers were creative at getting their jobs done without it. However if 10% or 300 of those machines weren't working you would have a serious problem and you'd do something about it.

Is a convenience store so much different? You have invested an average of $20.00 in each and every unique product in your store. With 3,000 products in the average store, 10% or $6,000 adds up to a wasted investment. Worse, they are occupying valuable selling space that could be producing a profit for you.

The price, of course will determine whether and at what rate the item sells. If it's priced too low, you may be losing money on it. If it's priced too high, no one will buy it, or it might not turn enough to produce the income you need to keep your business running.

Ongoing costs increases lessen your profits with every order received. Items that were originally marked up for 30% profit in January, may be selling below cost before it's brought to your attention. With an average of 3,000 to 4,000 items in your store this can spell catastrophe for your business.

Pricing a product for maximum margin is ambiguous unless you include 'turns' in your equation. Else, we could just price everything for a million dollars and sit back and wait. If you're to be successful, you will need to vary the retail price of every item according to prevailing conditions. *Category Management* does not provide for monitoring turns on individual products.

Let's explore this equation using an example: You can sell anything at any time if you put the right price on it. The trick is to put the 'right' price on the item to generate

maximum turns, and maximum turns are dependent on prevailing conditions.

If it's a hot summer day, a consumer will pay more for a cold drink than she would if it were 20 degrees outside, at a time when she might pay more for hot coffee or cocoa. Likewise, patrons will pay more for breakfast items during the hours of 6 A.M. and 8 A.M. than they would at say, 2 P.M. But, that doesn't necessarily mean that breakfast items can't be sold at 2 P.M. On the contrary, I repeat, *you can sell anything you want at any time of the day if you control the pricing and presentation properly.*

Let's imagine you were to sell honey buns for a penny at 2 P.M., I can guarantee, you would sell more honey buns at 2 P.M. than anyone else in town. So you see? Whether you sell honey buns at 2 P.M. or not is more dependent upon prevailing conditions than anything else, advertised price being one of them.

For a moment, let's think about time affected items in your store. Most stores have a substantial amount of space allocated for items like these. In a twenty-four hour store, the majority of the time they just sit there taking up space, space that could be occupied by items that might sell if only there was a place to put them.

If an item sells well for eight hours during the day, that suggest that 66% of the time it is simply occupying valuable real estate. In this case, for the majority of the day, these items are producing zero profit. Worse, they are costing you money by simply being there. By lowering the price during this dormant period, every additional turn we would not normally get would be extra profit you will not see if you do nothing at all. Do that on a single item 365 days a year and it might pay the light bill for a month. Finding a way to do it on all products and it might go a long way toward doubling your overall profits in each one of your stores.

But "wait," you say. "Changing prices in the middle of the day and then back again wouldn't work in my environment." Exactly! You are absolutely correct. Put

another way, this is just one small bit of evidence that something might be wrong with your environment. So let's put our heads together and see if we can easily alter your environment so that you might take advantage of this simple opportunity.

An electronic shelf tag costs around $4 and can be controlled by a computer at little or no cost. Assuming that a shelf tag might last a minimum of three years, it comes to about $0.00365 a day. Selling one additional item for a measly $0.05 profit would pay for that shelf tag nearly fourteen times. When you factor in the current cost of putting a pricing label on each and every item, and how many items are probably lost to spoilage due to ineffective use of price changes, the amount of extra profit made by using this method could be remarkable indeed.

But 4,000 electronic price tags hanging off of shelves may create more problems than they're worth. But the profits to be gained from varying prices is too great to be ignored.

How about price checkers? Today, they cost around $575.00 each. Three or four of these strategically positioned price checkers at the end of each gondola will do the same thing for a fraction of the cost. Supplement price checkers with a couple of flat panel displays announcing prices of the most popular items and putting temporary bargains in red could be an even better solution.

"Rolling back prices" is not new by any means. Our good friends at Walmart have made billions of dollars using precisely this method. Prices at Walmart fluctuate and give the consumer the impression that she is getting a bargain. Does she get that feeling when shopping in your store? Is the price she must pay in your store the penalty for forgetting to buy it from Walmart? Gee, I hope not.

Who has control over your inventory?

Allowing suppliers to determine what is placed in your store lays the foundation for disaster. Suppliers sweeten their balance sheets by shoving items in your store that will not sell before the next delivery cycle. Pre-salesmen and rack delivery personnel are paid according to the inventory they put there. As a result, the average convenience store has twice the inventory needed to meet customer demand.

But wait, what am I supposed to do with those empty shelves? Decrease the square footage of selling space the same way that company in New York did, or put something on those shelves that will sell. This might mean doing business with multiple vendors. Is that really such a bad idea? Forcing suppliers to compete for your business is the basis for Walmart's success and a tool seldom used by retailers.

Knowing what's selling, maximizing profits on every item, ordering what you need to meet customer service levels and no more, on-going audits to maintain a state of accuracy, reducing shrinkage and theft, the ability to alter selling prices to increase turns, etc., are only a few of the tricks you can employ in your operation to maximize overall store profits.

How Effective Supply Chains Work

1. A customer comes to your store's counter and purchases a drink and a bag of chips.
2. Within seconds, the transactions are fired to a centralized ***data center***, decrementing the quantities of items in your store.
3. The *Preferred on Floor* level of each product is checked.
4. At the ***data center***, the instant the *On-Hand* quantity falls below the preset *Preferred on Floor* level, a Purchase Order is generated equal to the minimum order mandated by the supplier.
5. The *Purchase Order* is sent to the supplier.
6. At the ***data center***, the *On-Order* field is incremented to prevent new orders to inventory already ordered.
7. On delivery day, the supplier picks the items needed and loads them on his truck.
8. An *Inventory In-Transient* record is logged at the ***data center***, accessible by the supplier, the store's headquarters, and the store itself.
9. The inventory arrives at the store where it is scanned upon arrival.
10. The ***data center*** compares the inventory received to the *Inventory In-Transient* notification and any discrepancies are logged and immediately reported to the supplier and to the store's headquarters.
11. An invoice to the supplier is created and logged at the ***data center***.
12. The retail price is checked, the average cost of the item at the store is recalculated, and the

retail price is adjusted to compensate for the changes in cost. New items are priced according to a preset mark-up percentage within their assigned category and electronic shelf tags change to display the new price.

13. The ***data center*** automatically sends the new retail prices and any new items to the POS.
14. The inventory is placed on the shelf.
15. On the due date, the ***data center*** generates an ACH to your bank which results in an electronic payment to your supplier.

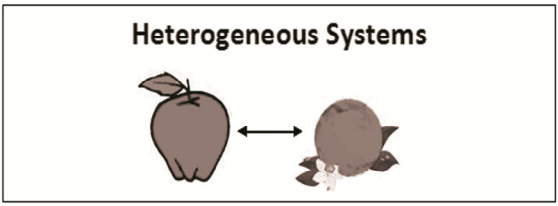
I confess this is a little bit better than Walmart's Retail Link®, but it's possible you can do things they can't. How? Their technology may be upgraded constantly, but its core is based on twenty year-old ideas. Convenience stores are smaller, more compact and don't require a huge staff to manage.

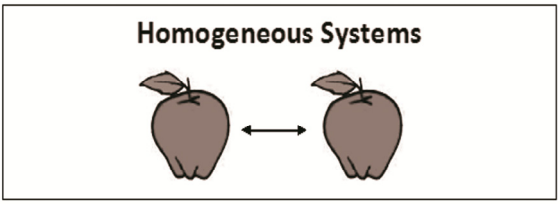
This is the kind of inventory system you should use, and it goes a long way toward doubling the profits in your store.

Integration vs. Interfacing

The issue of how "interfacing" differs from "integration" is going to be a matter of concern for systems designers for decades to come. Yet, no other issue is more crucial to our success as we go about the business of competing in a Walmart environment. Here we will try and explain these two environments in a non-technical way, rate their importance (with respect to one another), and help you to understand why one environment is much better than the other.

The easiest way to differentiate "interfacing" from "integration" is to say that "interfacing" is the exchange of information between one or more heterogeneous[6] systems (apples to oranges), whereas "integration" is the joining of one or more homogeneous systems to function as one homogeneous[7] system (apples to apples).





We live in a mixture of homogeneous and heterogeneous environments. We use the same electricity,

[6] consisting of parts or things that are very different from each other

[7] consisting of parts or things which are similar to each other or are of the same type

the same water and sewer services, the same Internet and the same telephone services; but we drive different cars, use different cell phones and computers, we live in different houses, and each of us is a unique individual having different likes and dislikes, different skin color, different religions, etc., etc., yet over the last couple of hundred thousand years the majority of us have taught ourselves how to deal with heterogeneous relationships in a way that appear to emulate a homogeneous environment. It is when there is a breakdown in our ability to operate in our virtual homogeneous environment that trouble starts.

Co-workers, working toward the same goal must work in a homogeneous environment in order to get things done. The boss/worker relationship is a little more heterogeneous in nature, but not completely. Bosses and workers must cooperate at some level in order to get things done.

Homogeneous environments require a constant interaction of ideas. When I was a radar repairman in the USAF, I worked on guidance systems for missiles and I learned the difference between "positive feedback" and "negative feedback". The principals are quite simple:

Negative feedback is a type of action during which a system responds so as to reverse the direction of change. If someone pushes you, you push back, saying in fact, "I don't want to be pushed."

Since the process of negative feedback tends to keep things constant, it is stabilizing and attempts to maintain homeostasis. Warm blooded animals maintain balance by adjusting their body temeperature to offset changes in response to outside influences.

When a change of variable occurs within a stable negative feedback control system, the system will attempt to establish equilibrium (i.e. the thermostat on your air conditioning system).

Positive feedback is also a type of response. Open systems (ecological, biological, social) contain many types of regulatory devices, among which are systems that involve

positive feedback and its relative negative feedback. When a change of variable occurs in a system, the system responds. In the case of positive feedback the response of the system is to change that variable even more in the same direction. This has a de-stabilizing effect, so left unchecked, does not result in homeostasis. In some cases (if not controlled by negative feedback), a positive feedback loop can run out of control, and can result in the collapse of the system.

Positive and negative do not mean or imply desirability. The negative feedback loop tends to slow down a process, while the positive feedback loop tends to speed it up. Positive feedback is used in certain situations where rapid change is desirable.[8]

Organizations such as ours consist of webs of feedback loops.[9] A **system** is composed of anything we can draw a line around. It may be a particular job, functions performed by a department, or an activity involving the entire enterprise. A system performs best when feedback loops utilize a mixture of positive and negative feedback toward a common objective. In order for a system to operate at optimum efficiency, all elements that make up a system should be networked into these positive and negative feedback loops.

The efficient replenishment and management of inventory is a system requiring the involvement of suppliers. In order to epitomize the activities within the system we must find a way to integrate the supplier into the loop, else we create a *disconnect in the supply chain*.

The reason Walmart has imposed so much grief on its competitors is due to its ability to incorporate suppliers into a web of feedback loops. In contrast, most independent retailers operate in closed systems and rely only on negative

[8] www.wordiq.com

[9] Veryard Projects Ltd & Antelope Projects Ltd.

feedback in dealing with their suppliers. *We are about to run out of Ivory Soap – send more.*

The definition of a "Managed Supplier Partnership" (MSP) is a relationship in which product lines are forecasted by a supplier from a retailer's data, planned by the supplier, and delivered directly to the retailer. Unless your supplier is in the loop, you have no prayer of being included in the supply chain. The efficiency in which this system operates is what makes the difference that has given Walmart their obvious edge.

I have heard that at least one supplier has devised such a system in which it bases future deliveries on historical data. This type of environment is akin to a positive feedback loop. In a positive feedback loop the intention is to change that variable even more in the same direction. Hence, we find 1,000 days of Orbit Wintergreen gum under the cigarette rack and growing by leaps and bounds. An environment consisting of only positive feedback can run amok or fall short of the purpose of replenishment— the appearance of just the right amount of inventory at the right price and the right time, which affects the service level of the organization.

Service level is the percentage of time product is in stock for the customer. What we forget much of the time is that a 90% service level translates to a potential 10% out-of-stock rate. At the store, this means that when the customer desires to buy the product, it won't be available 10% of the time (lost sales).[10]

An inventory replenishment system that incorporates both positive and negative feedback is necessary if your intention is to reach equilibrium in the service level process – how much of what inventory is too much, and how much is not enough? That's the question.

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[10] The Art & Science of Computer Assisted Ordering – B. Anderson

There can be as many as 4,000 items in the average convenience store. Trying to optimize the service level on 4,000 items using a computer system that does not provide integrated positive and negative feedback is highly inefficient, and inefficientcy cost you money. Basing deliveries on what was sold last month, or what the store is running out of, is not enough if your objective is to compete with companies like Kroger. By incorporating positive feedback to increase the items on the shelves and negative feedback to slow down or reverse the process, service level is optimized.

A system of negative and positive feedback is not possible unless all systems operate in a homogeneous network. That is why you cannot connect seamlessly to your suppliers as Walmart does. While you may be sending and receiving data electronically, it's far from being a homogeneous network or supply chain.

Have you ever wondered why a popular item goes missing for weeks at a time? My wife loves Sunkist Diet Orange, yet half the time when we go to the store they are out of it. Had the store's system been broadcasting the sales of that product to the supplier as they occurred, the store would never run out. By the same token, the shelf with the non-diet variety of the same product is always filled to capacity. Same problem… different results.

In a homogeneous network such as ours, when a customer takes an item from the shelf and pays for it at the sales counter, we have the capability of immediately alerting your supplier to the sale of that one, single item. The transmission of this event allows your supplier to forecast next week's deliveries.

Order determination replaces physically examining store shelves to determine product to order. According to Barbara Anderson, author of the book, "The Art and Science of Computer Assisted Ordering", order determination includes three basic functions:

- Product Need Determination
- Order Generation
- Order Management

Ms. Anderson states "product need determination calculates how much product is required to meet a targeted service level, or a fixed or calculated order-up-to-level. This initial calculation uses basic, seasonal and promotional forecasts. Based on predictions of consumer demand the product need is calculated."

The efficiency and timing of product need calculations is directly proportional to the optimization of customer service level. Other factors include:

- Product limits – the maximum number of items that can physically occupy the store's shelves.
- Forecasting – information based upon historical data and future needs expectations.
- Order limits – the maximum (or minimum) units that may be ordered from the supplier
- Product availability – does the supplier actually have this merchandise in his warehouse?

Ms. Anderson writes, "All of these elements must be taken into consideration when calculating product need. Order determination creates suggested orders, automatic orders, or audits on vendor deliveries. Not all categories, planograms, or product lines within one retailer need to be managed in the same way, but ALL should be managed under one system."

Product limits may occur at any time, *forecasting* requires the existence of a perpetual inventory system, *order limits* and *product availability* may be changed by the supplier at any time - In short, according to the experts, **product needs cannot be determined without the use of an integrated, homogeneous, centralized computer system.**

Walmart is well known for its excellence in managing its inventory, but it could be better. In fact, Walmart's inventory management may become a problem in managing its own growth. Retail Link©, Walmart's inventory management system, is over twenty years old. In computer years, that's a long time indeed.

Walmart's Retail Link© is not an integrated, centralized processing system. Instead, it operates by trading transactions using a method known as EDI. Electronic ordering is all the rage among convenience store operators as of late. The cost of EDI, prompted XML to become the convenience store industries' choice for electronic ordering. They have even gven it a new name NAXML. But XML by any name, like EDI is not an integrated environment, and it's not cheaper either. XML and EDI are attempts at mimicking homogeneous envrioments but what they actually are are heterogeneous environments held together by data synchronization of heterogeneous environments. To put it simply, since these systems cannot talk to each other, they call on a translator (known as a parser) to interface one system to another.

Well, what's wrong with this? What's wrong is the parser has to be paid. Someone has to monitor and modify the parsing software every time one party decides they want to do something different. It's like when the pump maintenance guy upgrades the pump controller and the POS system says, "Huh?"

Nobody buys gas until the POS guy comes to your store and tries to figure out why his POS system is not talking to the pump controller. You may not have this problem if the pump controller is integrated with the POS system. Either way, I hope you see the importance of *integration* over *interfacing*.

Walmart is no more immune to its competition than the telegraph was immune to the telephone, railroads were immune to the interstate higway system, radio was immune

to television, and IBM was immune to the personal computer and the Microsoft revolution.

"Convenience" is only one area where convenience stores can compete against Walmart. I'm sure there are a few people that would go through the Walmart experience of parking, walking a mile to the store and standing in long checkout lines to buy a loaf of bread and a gallon of milk, but I don't know of any.

Walmart's inventory system is vulnerable as well, and we needn't compete with Walmart by assimilating to them, we need to do it better.

We have built a better inventory management system by incorporating true "Managed Supplier Partnerships", automating it, using order determination in ways Walmart's system cannot emulate, closing the gap just enough to give us an overall competitive advantage in managing our inventories.

Alexander Graham Bell did not compete with Western Union by finding a better way to transport dots and dashes. He developed a means to "integrate" parties into two-way conversations, lessening the value of his competitor's advantages in the communications arena.

The study of "Technology Impact Analysis" teaches us that new technologies pose competitive threats and remarkable opportunities. Enterprises mired down in 20 year-old technologies are vulnerable to these threats, and less likely to change. The spoils go to the visionaries that see this opportunity and run with it.

The experts say that automating the supply chain will save retailers and suppliers $40 Billion a year.[11] Industry consultants have used figures as high as $100,000 savings per store per annum. A great deal of these savings will come from the elimination of purchase orders and invoices, optimization of the service level, the elimination of synchronization between heterogeneous systems, and the

[11] Progressive Grocer Magazine, Feb 15th 2004

formation of negative and positive feedback loops to control inventory needs.

Our system uses both negative and positive feedback loops in suggesting inventory replenishment. All data is maintained in a central location accessible 24 hours a day, 7 days a week, 365 days a year in an environment that allows access through Internet connections. The visible data is protected against unauthorized access and is customizable at any level. An increase or decrease in sales activity for an item automatically tunes the suggested re-order levels.

As long as the industry continues on the path of "interfacing" heterogeneous systems rather than "integrating" homogeneous systems, billions of dollars will continue to be lost due to inefficiencies in the supply chain. Unfortunately, most so-called experts will have you believe that we are doomed to systems that cannot be integrated, so their answer is to "interface" hetrogeneous systems using EDI and XML and synchronizing data through the use of expensive to build and expensive to maintain parsing programs.

Ten years ago they would have had us dead to rights, but no longer. These experts remind me of buggy-whip manufacturers when Model T's started rolling off Henry Ford's assembly line.

Interestingly, the four-foot, eight-and-a-half inch width between railroad tracks has not always been the standard in the U.S. According to the Encyclopedia of American Business History and Biography, prior to the Civil War there were twenty different widths of railroad tracks ranging from three to six feet. Supplies transported by rail had to be transferred by hand whenever a car on one gauge encountered tracks of another gauge and more than 4,000 miles of new track was laid during the war to standardize the process. Later, Congress decreed that the four-foot,

eight-and-a-half inch standard would be used for transcontinental railway.[12]

If you thought technology was above all that now, you need only look at the current state of computer systems to know you are mistaken. There's EDI, XML, NAXML, XML/400, .CSV, comma- delimited text, db2, – not to mention ACSII and EBCIDIC. The National Association of Convenience Stores (NACS) has at least attempted to get everyone to subscribe to a standard method of trading transactions. But even if successful, this only works on the problem of "interfacing" and pays no attention to "integration".

Why is "integration" so important?

Maintaining an accurate perpetual inventory is simply not possible without integration, and a perpetual inventory system is crucial to solving the $40 Billion supply chain inefficiency problem. Here's one example:

If a convenience store operator decides to add a new product to the line of products sold in his stores, he must:

- Contact the supplier to determine whether the items are currently available for purchase.
- After acquiring the purchase price, he must determine the selling price of the new items.
- Program each of the cash registers to contain the new item, including the sales price, taxes and the bar code.
- Send orders to the supplier to ship a number of these new items to each store.

After the items have arrived at the store:

- Determine the number of items received are the number ordered.
- Wait for an invoice to arrive from the supplier.

[12] http://www.truthorfiction.com/rumors/r/railwidth.htm

- Determine if the invoice matches the items ordered.

After the sale:

- Reduce the number of items on hand
- Check to see if the items need to be re-ordered
- Determine how many of the items need to be re-ordered

Periodically he must:

- Take an inventory of the items on the shelves
- Determine what has been lost or stolen and make an adjustment to inventory
- Post the adjustment to the company's bookkeeping system.

It should be obvious, automating these insanely redundant processes would be a much better solution. Look what you can do in a system like ours:

Automated Inventory Optimization and Supply Chain Management:

Every item in every store is linked to our data center by way of your POS, a wireless router, and a hand-held inventory receiver and auditing device. In the average store there are around 3,000 unique items. The instant an item is touched by a single sale, purchase or an audit, a series of calculations occur instantly on our mainframe computers located at our data center, using the following parameters: **Daily Turn Rate, Delivery Cycle, Safety Stock**(modified by season), **On Hand, Minimum Order**, and **On Order**.

Let's assume the last time the item was touched, the **Daily Turn Rate** was adjusted to 3.01245 and the **Delivery Cycle** is set by the supplier to be once-per-week. The **Safety Stock** (adjusted for the season) is 1.5, the **On Hand** quantity is twenty-two, and the supplier puts the **Minimum Order** level at ten. With no items already **On Order**, the

calculation the system suggests would be for you to order ten more items.

Now for simplicities sake, let's continue to leave the units **On Hand** at twenty-two and the **Turn Rate** increases to 4.36665. Without any action on your part, the order would be changed from ten to thirty to accommodate the accelerated rate of turn.

Now here's the interesting part. Suppose you could convince your supplier to deliver twice per week, changing the **Delivery Cycle** from seven days to 3.5. In this case you would only need ten instead of thirty, saving you the investment in the extra twenty unneeded items.

Now your immediate reaction might be, "Why do I care if I receive thirty more items instead of the ten I need to meet customer service level?" In this one isolated case, unless the individual items cost you hundreds of dollars, you probably wouldn't. But if you have 3,000 items in your store, the sheer volume of inventory over this store, and the twenty or 100 more just like it can be enormous.

In Summary:

Convenience store operators have not adapted to the changes in data processing technology. Yet they remain in ruthless hand-to-hand combat with companies like Walmart, Couche-Tard, Target, Kroger and 7-Eleven.

The industry is not pushing you in the right direction because they themselves do not possess the technology to make it happen. Your suppliers would like to help, but they doubt you will ever be able to afford the systems necessary to integrate into a homogeneous environment. Cloud computing has invalidated their assumptions, but your trading partners and competitors have yet to make their move. Laggards will continue to rely on positive feedback which has indeed run amok and turned the stores into suppliers' warehouses.

Early adopters who recognize and have the resources to implement new technologies *first*, have always been the

greatest benefactors; they will reap the benefits and stand to become market leaders in their respective industries.

Whatever you do, don't take you eye off the Internet. Its capabilities are becoming more apparent every day. Assumptions are continuously being challenged and disproven, and the operators who are first to see the changes will take home the biggest prize.

Nuts & Bolts

I was presenting at the Texas Oil Marketers Association trade show in 1987 when a young man with no visitors, stood in a booth across from mine near a cash register on a small table. Beside it, he had a bottle of catsup, a jug of mustard, and a can of half-consumed Coca-Cola.

I had recently had a conversation with a customer in Arkansas a few months before about the possibility of connecting a cash register with our computers over telephone lines and was curious about the possibilities or incorporating a scanning system. Besides that, I was feeling half-sorry that the young fellow had been standing there all alone for a few hours, so I walked over, introduced myself and asked him, "How do all those bar-codes get into the cash register? (Back in those days most of us still called them cash registers.) And he said, "You have to put 'em in there."

"How many are they?" I said.

"About 300,000," he proudly announced.

"You expect somebody to put 300,000 UPCs into that machine?"

"Naw," he remarked, "you only need to put in the ones for the things you sell."

"Good luck," I said, shaking my head and walked back over to where I came from.

1987 was a turning point for me. I had been selling big IBM computers and programming them for jobbers for six years and now most of the new people I talked to were convinced that personal computers and companies like Microsoft would rule the world.

At that time the Internet still belonged to the government, but they let the public use it for messaging. There were very few Internet connections available back then, and to get connected, you had to dial-up to a long distance number somewhere and pay the toll charge.

It reminded me of a communications network I encountered while selling yellow page advertising to an auto parts dealer between Ferriday and Vidalia, Louisiana back in 1965.

Now that was interesting. If people were looking for something they needed they would just announce, "Need a radiator for a '58 Chevy Malibu", or "Anybody got a right door panel for a '62 Camaro?" Directly, somebody from a place far off in Nebraska would sing out and the two would carry on a thirty second conversation and make the deal right over the speaker system where everybody could listen.

It wasn't until 1992, after Bill Clinton signed the Internet over to public domain, that a young fellow invented something call Hypertext Mark-Up Language (HTML) and people were able to use their PCs to get on the Internet and look at something called 'web pages,' which quickly became known as 'surfing the web.'

About the same time, one of my customers asked me to write some software that would run in the back offices of his stores so his managers could enter their store reports into PCs and the send the data back to the office where it could be verified and processed with my software running on his IBM computer. I called that product 'Satellite.'

My customer was so impressed, the next year he called me to his office and took me out to lunch where he suggested I figure out how to make his cash registers scan and do pretty much the same thing we were doing with the 'Satellite' programs.

I told him, "Yeah, I can probably figure it out, but it's gonna take a while and it'll be pretty expensive."

"You figure out how to do it," he said, "I'll pay for the development, and if it don't work, we'll just write it off." He kinda waved his hand when he said that, like it was no big deal.

For the next month, I made a dozen phone calls, accumulated some notes, did some calculations and called him back.

"Well, I figured it out," I said. "I think we can do it for about $125,000."

There was a pause and he said, "Well, put me down for ten."

Needless to say, I shelved that idea for a while.

However, all during the '90s I couldn't get the idea of integrating the POS systems to mainframe computers and making the POS a device, like a computer terminal instead of a stand-alone device that you could take information from and transport it somewhere else, like we were doing with Satellite.

Satellite worked well, but it required some manual work at headquarters. One customer had twenty-eight stores running Satellite and it took a dedicated person to collect the data, validate it to be sure the managers didn't make mistakes, and then pass it along to the mainframe for processing. If that person took sick, couldn't make it into work, or went on vacation, it was always a problem. Some days, data would sit on the receiving computer at headquarters for a day or two before it was validated and processed.

Something else was going through my mind during the 90s. In 1991 I became convinced that it wouldn't be long before computer software would become a service instead of a commodity. It made no sense to me that hundreds of thousands of people would continue to go to a store and buy the same thing when, if the software companies would allow it, it could be shared.

In the beginning, almost all serious software was written especially for each customer. They may have bought a product of some sort in the beginning, but very few companies were content with what they originally bought.

In the eighties software users started buying packaged software, but the problem for the software companies was once they'd sold their product in their market, that was the end of it. Planned obsolescence was not a factor because the

business world was evolving fast enough that within a year or two, some change would occur that would make the software obsolete. This provided a great opportunity to sell new versions of the software again, so that's what they did.

I once had a conversation with a Japanese computer programmer while giving a seminar for Dai-Ichi Kangyo Bank at the Japanese-American Institute of Technology in Honolulu, where he couldn't grasp the concept of 'versions'. He kept asking, "Why can't you get it right the first time?" I still wonder about that.

In the year 1999, IBM announced a new computer they call an 'AS/400 WebServer.' It was designed to provide a means to run software over the Internet. All you had to do is plug your PC into the Internet and go to work.

That was the product I had been waiting for. No more selling computers because most customers already had a PC and they could just hook them up to the Internet and go to work. No more installing software because the same software could be shared by everyone that was able to get an Internet connection. Speed was never an issue because instead of using slow, graphical user interfaces (GUI), we used Telnet. Things ran just as fast on a dial-up connection as it did on a computer in the office.

In March of 2000 I began renting my software over the Internet and converted all of my customers from having their own computers to using mine. The small monthly fee I charged paid for the services. When changes needed to be made, they could be made once and everyone using the software got the changes at the same instant. I could also modify a program and make it work for a specific customer's needs.

The buzzword for that new technology was 'Application Service Provider' (ASP) which was simply an extension of what was called 'time-sharing' back in the seventies.

In the fall of 2003, we began to explore the possibilities of integrating our customers' POS devices to our system using pretty much the same methods. We acquired an off-

the-shelf PC from a dealer and bought a software program from a company out in California and approached one of my customers who owned a few tobacco stores and he agreed to let us develop the system in his store.

After hooking up all the equipment and connecting the hardware to the Internet, we set up a wireless connection inside the store and used a hand-held data terminal to enter the inventory into the system. The hand-held units were connected by way of a wireless network in the store and through the Internet to a series of 250 networked mainframe computers located in Colorado, Wyoming and California in an environment they are now calling 'Cloud Computing.'

Now the interesting thing about this kind of environment is that storage is divided over 250 mainframe computers, so if one computer malfunctions the data is simply redistributed electronically throughout the network and things keep going as if nothing was amiss. This is in stark contrast to networks you may be familiar with where the system may be down for hours while servers are repaired or upgraded.

Also, there is a large staff of professionals that keep our network functioning, twenty-four hours a day and 365 days a year. The costs of all this is out of the question for a single business to bear. It is shared by the hundreds if not thousands of users that rely upon the same network to conduct their business. Since some of the users are government related, the highest level of security is employed to prevent data from being intercepted or damaged by viruses and hackers. Also, everything is constantly going through a backup process in the event of catastrophic failure somewhere in the systems such as earthquakes and brownouts.

Another advantage of this kind of environment is infinite expansion. As the network grows they just keep adding computers and the system redistributes the workload dynamically.

A new technology called 'virtualization' allows computers to do the same things with systems software, allowing a single computer to take advantage of multiple operating systems and system resources.

When a company expands someone just goes down to the local computer store, buys an inexpensive PC and plugs it into the Internet. In fact, it virtually eliminates the need for local networks in a company, using their routers merely to connect multiple devices to the Internet.

The savings enjoyed by using this kind of technology is simply enormous, eliminating the need of not only local networks, but the need for servers and the staff to keep them running.

By adding the POS devices to the network, everything appears to be running simultaneously on a single computer with unlimited speed and infinite expansion. I guess the best way to envision it is to think of your stores and POS devices as being in separate offices networked within the same building.

In our test store, while entering all of the items into the remote data center through the wireless connection, all of the data was immediately sent back to the POS devices. The first store took us about a month to set up. Changes, such as departmental classification, prices, descriptions, the preferred number of units to keep in the store, etc., were entered using PCs connected to the host computer or with the handheld remote devices mentioned earlier.

When personnel who managed the stores from headquarters wanted to make price changes they simply logged onto the host system and changed the prices there and the price changes affected the POS system simultaneously. We also designed a method to scheduled price changes in the future, so the retail price of the item could be changed at various times during the day, week, or month and changed back after the window of the current price had expired.

We also developed a graphical user interface (GUI) that allowed the store manager to maintain her price book by using UPCs or a product's description to change prices through a familiar GUI interface. This function allowed prices to be changed across lines of products. For example if all Marlboro cigarettes currently selling for $4.39 were to be changed to $5.43, it could be done with one single keystroke. This was done by selecting a unique subset of a UPC. For example: all products beginning with '028200' and priced at a certain price, or all products beginning with 'MARLB' and a current price of $4.39.

By using the price in the parameters we were able to screen out products such as Marlboro 72's which are normally priced differently.

The next issue we had to face was receiving. It didn't take long for us to find out suppliers didn't care much about UPCs. I talked about that earlier. But, if we were going to create a perpetual inventory management system, that problem would have to be resolved eventually so we accomplished that by ignoring the suppliers' invoices and creating our own.

After doing everything we could do in the tobacco store environment, in 2004 we began to install our first convenience store. That was a much more complicated issue because our customer was required to use Gilbarco GSite's and those POS devices did not allow for real-time manipulation of data. Instead, Gilbarco used a staging area where messages could be sent back and forth instructing the POS device to make the changes to the actual database that was used for scanning and pricing. Then, in order to affect a change the operator had to execute an 'Update From Pending' operation at the terminal.

Within the first three years (2004-2007) we had successfully installed the system in eleven convenience

stores and one 'Dollar' type variety store. Everything was working perfectly and then… a disaster occurred.

The day after Christmas 2007, our customer of twenty-three years decided to drop the scanning project with no explanation. So, the project was put on hold until August of 2009 when we received a call that they had decided to resurrect the scanning service in all twenty-eight stores citing the absolute necessity of tighter inventory control at the stores.

This also precipitated another change for us. All GSites were being abandoned for Gilbarco Passports to conform with PCI compliance. We rewrote the interface to support the Passports using their SQL Server and then we got another surprise. Gilbarco upgraded the Passports to Version 8.02 and shut down the SQL interface. The interface had to be rewritten again to transfer data between our data centers and the Passport through the XML Gateway.

Over the past seven years we gained a great deal of experience in this field and have defined several absolute necessities that must be done to make such a project work:

1. Beg, borrow or steal the services of a large data center to host your project. We were fortunate in the fact that we already had access to such an environment to begin with, but I do not believe we could have accomplished it without the assistance of a large staff to keep the systems running. It's simply too expensive to tackle on your own. The data center we use has over $25 Million worth of data processing equipment and a battalion of computer personnel working for them.
2. Be sure the facility will perform the backups automatically. The amount of storage to retain and manipulate the sheer volume of data between the data center and the POS devices, not to mention the price books and other data

requires a different level of management than most companies can offer.

3. Be certain all members of the project are on board and committed, or don't even think about starting your own. It will take several years to create the systems and integrate them into your back office systems. If everyone is not on the same page, costly delays and the loss of hundreds of thousands of dollars are at stake.

The problems with suppliers participating in your efforts can be resolved in one of two ways:

- Convince them to clean up their data and cooperate in your project or…
- Do what we did initially and ignore them completely. Create your own invoices by scanning the received inventory and where the supplier has made errors, point them out. Sooner or later they will get the idea.

Summary

It was impossible to track the expenses for a project of this nature, but I think it was definitely worth it. The necessity for better inventory control in convenience store operations is a given. We cannot continue to shove $60,000 worth of inventory in a convenience store and wait till the end of the month to see if it has produced a profit, and we have come to a crossroads given the current environment. We need to know what's in our stores, how long it will last, and whether or not an item is profitable. We also need to explore frequent price changes to give customers the impression they are receiving a bargain, reduce shrink and expand product lines within the same selling space.

The next question is, "What avenues do we explore?" I see three possible scenarios. That is not to suggest there may not be others:

1. Follow the Walmart model and develop proprietary, closed-loop systems.

   This option will require an enormous upfront investment and maintenance expense involving a rather large IT staff and hardware that retailers do not have at this time. It's not to suggest it's impossible, but technology and salaries have to get a whole lot cheaper to make it worth the investment.

2. Follow the 7-Eleven model and hire a third party provider like the service we offer to manage your network and provide the software for you.

   This option is much more economical than the first one, because the costs can be shared by many thousands of companies. The downside is,

it forces you to rely on a third party who controls the cost of the system. Also, the only advantage to the third party is the money you pay them for the subscription service. However, contracts can be negotiated for several years in advance. 7-Eleven recently renewed its contract with HP Enterprise Services until the year 2012. 7-Eleven could have adopted the Walmart model, but obviously they felt the cost savings were worth the risk. We have a customer now who is running in a similar model we created with their help.

3. Convince your suppliers it's in their best interests to provide these services for you.

   I may be cutting my own throat, but I have to say that in the end, I believe this to be the best alternative. My reasoning is this: Suppliers would profit equally if such a system were offered and interfaces between suppliers and retailers would be seamless. I spoke with Nabisco two months before they were acquired by Phillip Morris and they indicated they would be amenable to such a relationship, citing their studies showed them if their drivers were to have knowledge of what products to load on their trucks before leaving the warehouse, it would save millions of dollars annually.

   More recently, I spoke to a representative of a large grocery supplier who told me a study they did two years ago indicated it would increase their sales by twenty-eight percent. I think they only looked at a few amenities in their study because I am certain the figure is at least forty percent or higher.

In conclusion, a supplier who comes up with a good plan to help manage their customer's inventory on a per item basis would gain an advantage that will be hard to equal, and I predict that someday retailers will choose suppliers according to the services they offer rather than the deals they bring to the table. The benefits would be mutual, with the supplier coming out slightly ahead. It would also be much more economical to implement because suppliers already possess most of the hardware necessary to do it quickly.

Cloud Computing has other amenities too numerous to mention. For example, we were recently able to implement a proprietary card system which collects store sales in real time, checks a customer's credit before allowing the sale, and instantly charges the customer's account. It was done quickly and cheaply because the Passport has a card reader as do the pumps and Gilbarco makes the transactions available for us to collect. As new things come along, Cloud Computing will play an even larger role.

We will continue to research new possibilities as the market expands. The interesting thing about the knowledge gained from new technologies is they provide you with fresh new insights you would have never thought about otherwise, but there is no doubt in my mind, Cloud Computing will breathe new life into the Convenience Store Industry and be a major stepping stone for the seventy year-old industry.

I think I was seven years old when the Southland Corporation built the first Pak-A-Sak store in our neighborhood, across the street from our first shopping mall. I still remember the manager's name that ran it. His name was Mr. Thompson. I wonder what Mr. Thompson would think about convenience stores today. Looking back, I

don't think he would see much has changed. I really think we need to do something about that.