



Inventory Management White Paper

Tech Systems Inc.

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Why the Need for Good Inventory Management ?

In this era of intensely competitive distributor markets and generally shrinking profit margins, effective inventory management is more important than ever for distributors. In today's economic climate, a bloated inventory which does not reflect the appropriate product mix to serve the needs of a changing customer base becomes more of a liability than an asset to a distributor.

Studies show that inappropriate asset management is the number one reason that distribution companies fail. Many distributors have found that lasting improvements to their bottom line profitability have been easier to attain through cost savings realized from better inventory management than through expansion of overall sales.

Let's assume that a distributor has an \$800,000 inventory. Let's also assume that the distributor is carrying 10% (\$80,000) more inventory than is actually needed to service their customers. An accepted carrying cost is approximately 30%. This computes to \$24,000 in yearly expense to carry the excess inventory. At a net profit margin before tax of 3% of sales, a distributor would have to sell a whopping \$800,000 to increase his profit margin by the same \$24,000. Many distributors are carrying 30%-40% more inventory than necessary. Using the same formula, that computes to \$100,000 in annual profit to the bottom line. It is easy to make a powerful argument for better inventory management. Effective inventory management is a profit generating activity which has the potential to put additional dollars on the bottom line

even without increasing your yearly sales level.

Two Primary Goals of Tech Systems Inventory Management

1. High customer service.
2. Minimize the inventory cost.

It is a recognized and proven fact that you cannot achieve these goals with out the right technology. You must computerize the inventory purchasing function in order to balance these two conflicting goals. The right technology will control your inventory so you can manage it. Control is the mechanical chore of maintaining accurate records. Management is the application of decision-making techniques to achieve the desired levels and product mix coming into the warehouse. If you are not using proven software to analyze your inventory data and provide good replenishment controls, you might as well head to Vegas and hit the crap tables. You might have better odds.

What is Tech Systems Inventory Management ?

The Tech Inventory Management System has built in procedures and formulas that adhere to the teaching of one of the best inventory theorists, Gordon Graham. His theories and procedures are time tested and have developed over the last three decades. The Tech Inventory Management System implements these theories and formulas so a distributor can provide the highest level of customer service at the lowest possible cost. It strips away the mystery and the complications of these formulas in order

that an average distributor can achieve results.

Benefits Of Tech Systems Inventory Management:

You can expect these results by implementing our system.

- ◆ Achieve inventory turns of 5-6 in the central warehouse. (calculated on Cost of Good Sold on stock items only)
- ◆ Achieve inventory turns of 10-12 in the central warehouse. (calculated on Cost of Good Sold on stock items only)
- ◆ Decrease your inventory investment or working capital by 10% - 40%.
- ◆ Achieve a shelf count accuracy of 95% or higher in the warehouse. (People will trust the counts in the computer!)
- ◆ Increase the productivity of your people.
- ◆ Identify and eliminate your dead stock to reduce carrying costs.
- ◆ Classify your inventory into 13 classes so everyone will understand which products are driving the revenues and profits of the company. (Classes 1-4)
- ◆ Reduce your inventory write-downs at year-end because you are identifying dead stock earlier.
- ◆ Achieve GMROI of 125-150%.

- ◆ Reduce shrinkage and security in your vault.
- ◆ Use powerful tools to analyze your business and manage by exception.

What will we focus on to achieve these goals?

Tech Systems' Inventory Management system focuses all aspects of the warehouse to find efficiency. We believe our role as your software provider is to provide the information, training and tools to help you run the business more efficiently. Some of those tools and areas of focus are listed below.

- ◆ Automate Central Warehouse Replenishment.
- ◆ Automate Branch Replenishment.
- ◆ Procedures for adding products and deleting products.
- ◆ Identifying when to start stocking a special order product.
- ◆ Dead stock identification.
- ◆ Disposition of Dead Stock.
- ◆ Identification and Replenishment of Seasonal Items.
- ◆ Identification and control of "Must Have" items through by adjustment of safety stock percentage on each product and warehouse.
- ◆ Calculation of Inventory turns by product group.

- ◆ Calculations of profitability on stock items, GMROI.
- ◆ Calculation inventory shrinkage.
- ◆ Calculation of Customer Service levels.

Gordon Graham Principles Overview

The Gordon Graham Inventory Management principles are based on a combination of operational (qualitative) and formulas (quantitative) components that help Distributors maximize profitability. This document does not attempt to detail all of the operational requirements or formulas but rather provide an overview of what some of the key principles are and why they work!

Operational (Qualitative) Components:

1. **Accurate and timely record keeping!** Before any formula or computer program can help you make better decisions about what to buy and how much to buy, you need to have an accurate count of what you have on hand stored in the computer. Inventory receipts must be posted on the same day they are received and customer shipments (invoices and pick tickets) must be entered and updated on the day they occur. "A Days Work In A Day" as Mr. Graham refers to is a cornerstone of the process. "Cycle Counting" or verifying that the shelf count of a portion of your sku's on a daily basis, matches the computer count helps keep your computer records accurate. This process insures a higher level of customer service by

reducing "stock outs" and a higher level of profitability by reducing the potential for buying too much of the wrong items.

2. **Guard your vault!** You have probably heard the analogy that Distributors would be much more protective of their inventory if it consisted of stacks of \$10, \$20 & \$100 bills. Banks do not allow unauthorized personnel into their vaults and you need to implement similar practices in your warehouse! Samples do not get removed without paperwork and customer orders do not get picked without a picking ticket!
3. **Good Housekeeping!** Inventory must be neatly stacked on shelves and have bin location assigned. Items placed in aisles are subject to damage or loss and impair productivity. Items covered with dust or piled in a corner are a prime candidates for the dead stock report.
4. **Communicate your goals and expectations!** Make sure that your employees understand that you are committed to improving your business processes from the top down and bottom up. You will hear all kinds of reasons and excuses why a new way of doing things can't work. You need to make it clear that people do not participate in improving how you manage your assets will need to find work somewhere else!
5. **Reward achievement!** Adding a carrot to go along with the stick will

motivate most employees. Consider posting thermometer graphs showing improvements in factors such as count accuracy and inventory valuation levels with clearly identified milestones and rewards.

Mr. Grahams books cover many additional operational requirements for maximizing your return on investment. These factors can be implemented even before you embark on installing your new software and will help insure that you receive the maximum benefit from it.

Formulas (Quantitative) Components:

1. **Usage Tracking.** Your software must provide an accurate summary of usage for the past 12 months. The usage rate should be captured in “buckets or totals” by month to allow the computer to project usage and allow buyers to review it easily. Seasonal products will look back 12 months to project buying targets for upcoming months. Remember, your computer software should notify you of abnormal usage (spikes and dips) that will cause the forecast to be inaccurate and your buyers will need to easily spot the abnormal usage to help them determine the cause and make the appropriate adjustment or purchase.
2. **Review Cycles.** If you are not doing so already, you will need to establish regular review cycles of your inventory by product line or vendor. There are many factors that go into determining what the

review cycle should be including vendor minimum purchases for special pricing, terms or freight allowances, lead time (the amount of time from when you place an order until you receive it) and reliability of the vendor in meeting commitments. You can start formulating Review Cycles by taking your total purchases from a vendor during the prior year and dividing this number by the minimum purchase required for special pricing, terms or freight considerations. Example, you purchased \$120,000 in merchandise from a vendor during the prior year and the vendor offers special pricing for orders of \$10,000 or more. This would result in a review cycle of 30 days or one month between purchases of inventory for stock.

3. **Assure High levels of Customer Service** The higher the customer service level (percentage of orders that ship complete with no backorders) you wish to provide, the higher the value of inventory you will be forced to carry to avoid stock outs. Higher customer service levels will result in higher levels of safety stock. Mr. Graham discusses how to add new items to your inventory in his books in great detail. The key is that you need to arrive at an “authorized stock list” that represents a contract or commitment that you are making with your customers and then implement effective procedures to meet your service level goals.

4. Classify Your Inventory. In many distributorships, 20% of the items generate 80% of the sales and profit. One of the most common errors made when purchasing is done without using the computer to help manage inventory is carrying too much of the fast moving items and not enough of the slower moving items. This often results from placing orders to satisfy customer requirements and vendor minimums that are most easily met by buying “extra quantities” of the stuff that you know will sell. This results in tying up extra working capital in inventory and reducing turns. Tech Inventory Management computes and classifies your inventory each month.

Classification Definitions

1-4	Fast Movers (90% of your profit!)
5-12	Slow Movers
13	Dead Stock

5. Eliminate Dead Stock! While you can't control many of the factors that cause dead stock (shifting consumer preferences or new models) you can identify it before it becomes worthless and finds its way to the dumpster. Accurate computer and shelf counts are a key ingredient along with usage history. A simple report showing items that have not sold during the past 12 months (adjust the time to meet your products lifecycle) with quantity on hand and cost has enforced the need to implement a dead stock program for many owners and managers.

6. Inventory Exception Reporting

There are additional tools in the System that help you monitor Inventory levels.

- ◆ Item Stock Outs
- ◆ Inventory Surplus
- ◆ Items shipped that show no inventory
- ◆ Alternate Items
- ◆ Alternate Locations Surplus
- ◆ Inventory Statistics GMROI, Turns, Shrinkage, etc.

Rewards are Extraordinary!

Rewards for the work we have described can be exceptional. We have seen companies completely revolutionize their operations and culture.

Results vary by company but our history implementing this software has produced some amazing stories. Reductions of inventory have ranged from 10-40% as indicated in Graham's book. One company reduced their branch inventory by 67% over 3 years!

In summary, sound principles, software and procedures comprise the inventory management solution that delivers the return on investment you seek. Our professional staff blends these elements to provide you with the complete solution for your business.



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