

# Perspectives in Productivity

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FOR MANUFACTURING, WAREHOUSING, & DISTRIBUTION PROFESSIONALS

## ***SURPRISE: THEY HAVEN'T REPEALED THE BUSINESS CYCLE***

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This fact may come as a surprise to the twenty-somethings that were not yet working adults during the last recession. We have had to adjust to an environment where double digit growth expectations are not prodding top management into funding material handling logistics projects that have flimsy justification. However, do not despair. Prudent planning and hard analytical justification will still pry loose funding for projects that support the business requirements.

The reality of 2001 is that top management has reacted, and in some instances overreacted, to the general business slowdown that started early last year. So what do you do if the funding for the project you have been planning for the last year has been dramatically reduced? The simple answer is to try to salvage the fundamental element of your plan so that when capital funding is available you can build on the foundation.

The smart managers are working their plan in phases. They know what their ultimate plan is and are using the available capital to build for the future.

In practical terms, "downsized" planning can involve several areas: building size, racking and other picking/storage modules, conveyor/sortation systems, lift trucks, processing workstations, etc. The key is to have a coordinated plan which integrates elements from each area.

### **Real Estate**

Starting with the building, if the available capital funds are reduced you need to decide if having more structure and less equipment is a viable tactic. The converse is to determine what the minimum building requirements are and to allocate the balance of the available money to equipment. This is a fundamental decision that has long term strategic consequences. To some degree, this decision will be influenced by your company's real estate strategy. Many companies feel that their interests are better served by having their money in land and buildings that have the potential to appreciate in value rather than in equipment that can only be sold for 25 cents on the dollar.

The "real estate first" strategy may eliminate the potential to be the low cost producer in your market. A strategy that minimizes the building and maximizes the effectiveness of material handling technology may be the approach to gain an operating cost advantage that will help your company gain market share.

Since inventory is typically the primary driver of space requirements in a distribution center, alternatives to dedicating up to 75% of the total floor space to storage modules should be explored. These alternatives can include: pushing inventory back up the supply chain, using 3PL warehouses, or best of all developing a strategy to dramatically improve inventory turns such as incorporating cross-docking where appropriate.

### **Racking And Other Picking / Storage Modules**

If you have a five year plan, you can reduce the initial investment in the racking and other picking / storage modules by scaling back the initial material quantities without sacrificing the long term strategy. One of the simplest ways to reduce costs without compromising long term effectiveness is to minimize the number of levels of racks, case flow racks and other modules. A significant amount of money can be deferred by only installing the number of beam levels required for the first two years. This cost saving can be even more if decking and support bar costs are involved. If you can double stack pallets on the beams you may be able to store the same cube but with a loss of selectivity. You will need to coordinate with your rack vendor to determine how to maximize the effectiveness of the available capital. This strategy of minimizing the number of levels in a module can also be used in case flow racks.

### **Conveyor**

Any scaling back of conveyor systems should be done with the vision of the ultimate design determining the interim

*(Continued on page 2)*

(Continued from page 1)

plan. The “downsized” system should permit “bolt-on” additions that minimize disruptions to operations.

Planning considerations for the ultimate conveyor systems design should include:

- Routing of the future additional conveyor
- Future mezzanines and associated floor loading
- Roof load requirements for future ceiling-hung conveyor
- Power panel requirements

### Lift Trucks

Typically, lift trucks are the most scalable category of equipment because cutting back on the number of trucks is relatively simple. However, there are certain guidelines you should follow.

Do not compromise on the technology determined to be most appropriate for your operating requirements – only compromise on the number of units you purchase. If very narrow aisle (VNA) is best for you, then scale back the number of VNA trucks you initially purchase. Do not compromise and use “less expensive” trucks.

### Summary

The right way to scale back operations designs to fit “downturn projections” is to work backwards from the design that is right for your company’s business requirements until you have optimized the available capital. To conclude on an encouraging theme for you “twenty-somethings,” although the business cycle has not been repealed yet, downturns do lead to expansions. You need to be properly positioned to rapidly adjust to those double digit real growth rates when they return.

## Conserve Energy in your Warehouse

Remember the ‘70s with the lines at the gas stations and the focus on conservation of all energy forms? Well, the lines at the gas stations haven’t reappeared yet, but the focus on the supply and cost of energy has. What do managers involved with material handling and logistics need to consider?

Electric and gas supply and costs have become critical issues for many companies in various parts of the country. The following are some checklist points for you to review:

- Conduct an energy consumption audit
- Reduce the operating hours of your facility
- Convert existing lighting and HVAC systems to more efficient technologies
- Reduce lighting levels in inactive portions of your facility and/or convert the lighting system to an as required “instant on” system
- Adjust the thermostat levels without making people uncomfortable
- Charge your lift truck batteries during non-peak power demand times
- Review the energy efficiency of conveyor and compressor motors

Depending on the size, activity level and operating hours of your facility, the energy and related cost savings opportunities may be significant. These new costs need to be considered in your budgeting and costing structures.

If rolling blackouts are a possibility for your region, you should consider having your own power generator. The extent of the power to be provided by the generator will

depend on the nature of your business. At a minimum, you should consider having a backup power supply for your computer and related systems.

An independent backup power supply is not a new concept for warehouse and distribution center operations. Many refrigerated and freezer warehouses have diesel powered generators to reduce peak demand and to serve as backups in case of extended utility failures. Other facilities with critical shipping periods have rented backup generators to ensure uninterrupted power during the last week of the quarter or other key periods.

Another macro level area to review is your facility location/service area strategy. If you modeled your delivery costs based on fuel costs from two years ago, you may be in for an unpleasant surprise. Those outlying customers at the edges of your service territory may no longer be profitable.

In adjusting to the new energy environment, you have to determine:

- How has my cost structure changed?
- What actions can I take?
- What will my new cost structure be?
- What strategic decisions do I need to make to adjust to the new reality?

The key is to be fully informed while dealing with the new energy environment. As usual, those with the information and a plan to deal with the situation will survive at the expense of those who do not.

# Calculate Material Handling Equipment Costs Online In Under 15 Minutes @ [www.GrossAssociates.com](http://www.GrossAssociates.com)

Our handy little pocket guide, "Rules of Thumb for Warehousing & Distribution Equipment Costs" has become the industry standard for estimating material handling project budgets. With tens of thousands of hard copies in use, we've just launched "Rules of Thumb Online"...

Now, you can calculate budget equipment costs for more than 200 product categories online in less than 15 minutes and it's FREE! Just visit our website and click on the

"Rules of Thumb Online" icon.

There's no longer a need to call numerous equipment vendors, play phone tag with sales personnel, and wait days or weeks for budget quotes. Try it! It's simple to use and you'll have results in just minutes.

As independent consultants specializing in operations design for warehousing, manufacturing, and distribution, we do not sell equipment or software, nor do we participate in vendor partnerships or alliances. We deliver "Unbiased

<b>Budgetary Warehouse/Distribution Equipment Cost Estimate</b>					
Produced with the Gross & Associates "Rules of Thumb for Warehousing & Distribution Equipment Costs Online Calculator" <a href="http://www.GrossAssociates.com">www.GrossAssociates.com</a>					
Qty	Equipment Description	unit price range		calculated price range	
		Low	High	Low	High
4	Electric Trucks (w/ Battery & Charger): Narrow Aisle Reach Truck (3,000# Cap.)	\$ 23,000.00	\$ 30,000.00	\$ 92,000.00	\$ 120,000.00
300	Conveyor (Per Linear Foot): Belt	\$ 180.00	\$ 250.00	\$ 54,000.00	\$ 75,000.00
200	Pallet Rack: Standard Selective Pallet Rack	\$ 35.00	\$ 50.00	\$ 7,000.00	\$ 10,000.00
10	Benches & Tables: Work Benches (30" - 36" D x 48" - 72" W)	\$ 300.00	\$ 600.00	\$ 3,000.00	\$ 6,000.00
<b>Total Estimated Cost --</b>				<b>\$ 156,000.00</b>	<b>\$ 211,000.00</b>

## GROSS & ASSOCIATES STAFF NEWS

Don Derewecki's article "Getting It Right The First Time" was published as the cover article in the March 2001 edition of the American Production and Inventory Control Society's monthly journal.

Larry Shemesh's article "Warehouse Warfare" was the cover story in "Operations and Fulfillment Magazine." He also spoke on the subject of Computer Simulation Modeling at the NCOF annual conference in Dallas.

Bill Elenbark and Rob Muller spoke at the IIE Conference in Dallas on May 21st. The title of their talk was 'From Data to Design.'

John Yacka was elected as Treasurer of the Material Handling Society of New Jersey.

Bob Silverman penned the cover story for the June 2001 issue of "Binding, Finishing & Distribution" magazine. The article was entitled "Running Out of Space in the Warehouse? Ideas For Making the Most Out of What You Have."

Bob Silverman was interviewed by "Material Handling Solutions" magazine for their spring 2001 issue regarding his thoughts on what changes are coming in the material handling arena, and what the magazine's readers should do to adapt to the changing world of Material Handling and Supply Chain Management.

### BENCHMARKING INFORMATION

Graybar Electric is implementing a "hub and spoke" distribution network strategy. Graybar is planning to have 16 regional DCs to support branch locations providing customers with next day service.

By implementing a warehouse management system (WMS) Graybar has documented a 15% overall productivity improvement. Additionally, they have achieved a 10% improvement in space utilization.

These facts were published in the April 2001 edition of Distribution Center Management magazine.



**CONSULTANTS IN MATERIAL HANDLING LOGISTICS**  
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- Location and Distribution Network Analysis
- Operations Audits
- Computer Simulation Modeling

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**Golf Humor**

Jack was first up in his foursome. Eyeing the ball, he swung his club and hooked his shot over the fence and down a road where the ball crashed through the windshield of an oncoming car. The startled driver lost control of his vehicle, and it spun into a parking lot and bounced off three cars. Jack raced over to the crash scene and was relieved to find that no one was hurt. Almost immediately a policeman arrived and spotted Jack standing next to the car eyeing his ball. "Just what are you going to do about this?" demanded the policeman. Jack looked up. "Well Officer, I'm trying to decide whether to play it from here or take a drop."

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ADDRESS CORRECTION REQUESTED

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