

SUPPLY CHAIN, SOURCING & DISTRIBUTION

Winning at the Margins

“A man who does not think and plan long ahead will find trouble right at his door.”

Confucius

Supply Chain, Sourcing and Distribution is the delivery mechanism of the retail business: providing both what the business sources and how that product gets to market. It is a supply engine driving the work in buying, distribution, logistics and inventory management. That engine depends on input from the other functions of the business—Stores and Channels, Marketing, Customer Service, Merchandising and Finance.

Of all departments, Supply Chain, Sourcing and Distribution has dealt the longest with the competitive situation described in Tom Friedman’s book *The World Is Flat*. Offshore and outsourced production, technology-enabled process excellence and supply chain integration are part of the relentless drive for lower costs. After more than a decade of investment and continuous improvement initiatives, many retailers and brands have achieved what major cost savings are possible. Managing and winning at the margins is the new competitive arena.

Winning at the margins has led most retailers to take performance monitoring seriously. Dashboards, scorecards and key performance indicators (KPIs) are increasingly being used to quickly identify problems and profit gaps, although the practical implementation is often more difficult than the theory. Three critical barriers prevent Supply Chain, Sourcing and Distribution from working these margins to deliver the best possible performance.

Barrier 1: *The supply chain is not “in-time” nor flexible without a synchronized link to customer demand*

Supply Chain, Sourcing and Distribution depends on accurate and constantly updated information on what is required by channels and customers. If you don’t have accurate information matching demand and supply requirements for given product stock-keeping units (SKUs), you stand to lose sales and profit opportunities as well as risk disappointing shoppers. With better information, flexibility and plans, you avoid or minimize bottlenecks, over-stocks and stock-outs due to

unforeseen changes in customer demand. This just-in-time response relies on fast information feedback along the supply chain, where every supply step is finely balanced to avoid unnecessary wait times. Higher wait times increase inventory needs and therefore working capital requirements. By synchronizing the flow within the chain of events from sourcing, logistics, warehousing and storage, distribution and so on, cycle times are reduced.

Reduced cycle times translate into profit efficiency gains from incremental sales, cost savings, cash flow and working capital efficiencies due to reduced inventory requirements and carrying costs.

Barrier 2: *Supply process bottlenecks and downtime*

The supply chain continuously competes against time. Can this process be faster? Can supply steps and processes be re-engineered and simplified to gain time? The more steps between start and finish, the more bottlenecks and downtime risk may be hidden in them. The time to complete a series of process tasks is inflated by waiting periods. For a given product, how long does it take between sourcing and actual delivery and on-shelf availability? How does this compare to the competition? Where and what types of improvements are possible to reduce this time related process?

You must identify and eliminate predictable process time-wasters. While many solutions may be internal—such as work flow innovation, changes in equipment or upgrades to IT infrastructure—you may decide your business is better served by outsourcing to a specialist with technical and scale advantages.

Information sweet spots help generate continuous intelligence loops on the real cost of bottlenecks and downtime, showing you the benefits of increased automation or specialization.

Barrier 3: *Across the organization, cost averages disguise cost reality*

Across the supply chain, within channels and throughout in-store and related overheads, what is the true margin and profit relationship of your suppliers? While buying or gross margins may be well understood and monitored, how do unallocated costs impact profitability? Fully allocated costs may impact the true margin picture and therefore also the priorities of the business.

By breaking down processes into discrete activities and measuring them with accurate activity indicators, you can achieve real-time costing. The best indicators will vary with the situation. Some will be based on labor time used in an activity. Others may directly measure costs such as mileage and transportation costs, or measure activity drivers such as the number of imperfect orders. The more detailed this activity breakdown, the more accurate your understanding of actual costs. Relating these direct costs to allocatable overheads brings in further insight. For example, in-store shelf space carries a certain cost that can be added, generating a product margin per square foot (or square meter) perspective. These direct product profitability (DPP) insights offer genuine transparency for a more accurate fine-tuning of operations. Understanding and analyzing the

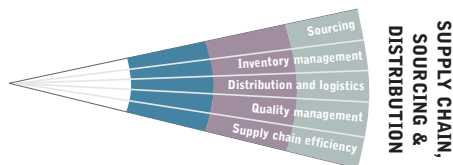
information sweet spots lets the retailer identify process patterns and suggest cost savings. Suppliers also can be encouraged to make certain performance improvements that improve process efficiency and reduce cost, in areas such as electronic Advance Shipping Notices (ASN) timeliness, fill rates, perfect orders and so on.

Understanding the value of the potential cost saving helps focus the effort and ROI priorities. The business can now evaluate product and supplier priorities from a true profitability perspective. Information sweet spots that let you understand what drives the larger cost categories will have an immediate and sizeable impact on managing actual costs.

Delivering on the Promise Made to the Customer

For Supply Chain, Sourcing and Distribution to win at the margins, every day and every shift must balance the need to reduce costs while staying agile enough to respond to new customer demands. Retail operations have the responsibility to lead six core areas of the company's decision-making:

- **Sourcing** → Ensuring timely and cost-effective development of needed merchandise
- **Inventory management** → Understanding the balance between inventory on-hand and delivering on customer service requirements
- **Distribution and logistics** → Achieving efficient distribution and delivery
- **Quality management** → Balancing the need to manage costs with the equal requirement to deliver quality
- **Supply chain efficiency** → Designing a process to monitor and analyze performance benchmarks to find opportunities for greater efficiency



Sourcing

The sourcing decision area monitors supplier performance benchmarks and manages supply requirements. Supplier compliance along given performance expectations are often scored for use in ongoing supplier evaluations. Perfect orders scores, delivery consistency, responsiveness and quality ratings are compared across the supplier base. These are not only cost and efficiency issues, but increasingly community and compliance concerns. Today retailers are concerned with being seen as “green” and “earth-friendly.” Setting a compliance expectation around recycling, carbon “footprint,” organic materials or sweatshop sourcing standards is seen as an integral part of creating the right image and retail brand equity.

Merchandise that arrives late can lead to stock-outs, and merchandise arriving too early causes unnecessary inventory build-up. Managers must be able to plan flexibly the sourcing of products with an open order book to align with customer demand. Your decisions must include how to respond to shortage problems, price increases and delivery delays. For example, you must decide whether to tie up cash in inventory to buffer against problems in delivery. Longer term decisions include determining how to balance the savings and/or better quality from exclusive supplier agreements against the risk of creating unacceptable dependencies. These decisions require information on specifications, procurement tenders, price quotations and vendor performance assessments. You cannot make the necessary sourcing trade-offs without access to information sweet spots and collaboration with suppliers. The better you understand the trade-offs, the more finely tuned your ability to win at the margins.

GOALS	METRICS	DIMENSIONS
Supplier Performance Rating (#)	Quality Performance Score (#)	Fiscal Month
Shipping Performance Score (#)	Responsiveness Rating (#)	Year
Load Time (#)	Supplier Claims (\$/%)	Quarter
	Unit Costs (\$)	Month
	Contract Quantity (#)	Week
	Contract Remaining (#)	Organization
	Credit Rating (#)	Division
	Average Order Size (\$)	Channel
	Min Order Size (\$)	Store
	Failed Orders (#)	Product Hierarchy
	Late Deliveries (#)	Product Category
		Product Group
		Product Line
		Supplier/Vendor
		Vendor/Merchant
		Supplier/Manufacturer

FUNCTION	DECISION ROLES	PRIMARY WORK	CONTRIBUTORY	STATUS
Sourcing	Executives Professionals	*	*	
Supply Chain	Executives Professionals	*	*	
Store/Channel	Professionals		*	
Marketing	Professionals		*	
Finance	Executives Professionals		*	*
Distribution	Executives Professionals		*	*
Audit	Executives			*

Inventory Management

Shipping and shifting products to meet customer demand and fill channel or store orders is the concern of the inventory management decision area. Balancing store and channel requirements, speed of order fulfillment and the volume of buffer stock you need to hold is key. The principle of holding buffer inventory is simple—but the larger your product range, the greater the complications. If a retail business has 100 stores and 10,000 items or SKUs, there are 1 million possible store and product combinations to monitor and serve effectively. The fact that buffer stock ties up cash compounds the urgency of decisions. For every week of buffer inventory, 2 percent of annual buying cost is being financed with working capital. But inventory management must also determine the financial and customer consequences of removing buffer stock from inventory. Tying up 40 percent of your inventory with slow-moving or rarely ordered products makes no sense.

Understanding the full implications of these decisions requires access to information sweet spots. In the example above, it means knowing the total annual sales and profit contribution of each of the 10,000 SKUs. Most will earn less than one percent of total margin. *Which ones? Of these, how many go to your target customer segments, and are they seen as critical for the assortment strategy? What is the financial impact of reducing the number of SKUs or limiting them to specific channels? Even if significant savings will result from a SKU rationalization process, you must align the decision with input from other functions such as Marketing, Customer Service, Merchandising and Finance. How should you handle the communication of discontinued products, and what measures are taken if key customers complain?*

GOALS	METRICS	DIMENSIONS
Inventory (\$)	Inventory Turns (#)	Fiscal Month
Inventory/Days (%)	Product SKUs (#)	Year
Inventory Costs (\$)	Warehouse Capacity (%)	Quarter
	Warehouses (#)	Month
	Time Since Last Order (#)	Week
	Store Deliveries On Time (%)	Organization
	Change in Inventory Costs (\$%)	Division
	Late Deliveries (#/%)	Channel
	Delivery Time (#)	Store
	Product SKU Order Frequency (#)	Product Hierarchy
	Aging Inventory Days (#)	Product Category
	Stock-outs (#)	Product Group
		Product Line
		Supplier/Vendor
		Vendor/Merchant
		Supplier/Manufacturer
		Shipment Type/Bill of Lading (#)
		Shipment Type
		Shipment Bill of Lading (#)
		Warehouse
		Region
		District
		Warehouse

FUNCTION	DECISION ROLES	PRIMARY WORK	CONTRIBUTORY	STATUS
Inventory	Executives Professionals	*	*	
Supply Chain	Executives Professionals	*	*	
Audit	Executives Professionals	*		*
Distribution	Executives Professionals		*	*
Finance	Executives Professionals		*	*
Purchasing	Executives Professionals		*	*
Store/Channel	Professionals		*	

Distribution and Logistics

This decision area includes managing quality, cost and timeliness of distribution and delivery. Short-term issues require the handling of store orders and shipping using the most efficient routing, scheduling and equipment. Long-term issues require determining whether you can reduce mileage costs, improve delivery execution and ideally exceed service needs for all channels. The operational infrastructure to distribute and deliver is intricate and costly. Many retailers work with third-party carriers, distributors, or wholesalers for their expertise or relationship with suppliers. Distributors specialize in particular channels, routes and/or territories, and can distribute more quickly and efficiently than most suppliers. Strategically placed supplier and distributor warehouses can be an advantage to, and extension of, your own warehouses.

While outsourcing makes sense on many levels, it does mean you lose direct control and have to accept the risks that come with loss of control. Managing such risks requires negotiating and monitoring distributor agreements with clear terms and commercial guidelines. Identifying, managing and evaluating the most effective distribution and logistics routes for your stores draws on the following information sweet spots:

GOALS	METRICS	DIMENSIONS	
Store deliveries on time (%)	Damaged Units (%)	Fiscal Month	Supplier/Vendor
Distribution Cost (\$)	Damaged Units (\$)	Year	Vendor/Merchant
Cost per mile (\$)	Deliveries (#)	Quarter	Supplier/Manufacturer
	Units Delivered On Time (#)	Month	Carrier/Distributor
	Insurance Cost (\$)	Week	Distributor/Carrier
	Lead Days (#)	Organization	Type
	Order Size (\$/M)	Division	Carrier
	Shipments On Time (#)	Channel	Carrier Region
	Total Shipments (#)	Store	Region
	Units Shipped (#)	Product Hierarchy	State/Province
	Failed Orders (#)	Product Category	County
	Late Deliveries (#)	Product Group	Zip Code/Postal Code
	Carrier Performance Scoring (#)	Product Line	Shipment Type/BDL (#)
			Shipment Type
			Shipment BDL (#)

FUNCTION	DECISION ROLES	PRIMARY WORK	CONTRIBUTORY	STATUS
Distribution	Executives	+		
	Professionals	+		
Logistics	Executives	+		
	Professionals	+		
Supply Chain	Executives		+	
	Professionals	+		
Purchasing	Professionals		+	
Store/Channel	Professionals		+	
Inventory	Professionals		+	
Finance	Executives			+
Audit	Executives			+

- **Order processing** → Editing, recording, stock allocation, vehicle route, delivery sequence, store and direct-to-customer delivery requests
- **Handling characteristics** → Ease of handling and stacking, susceptibility to damage, special requirements (e.g., temperature)
- **Packaging** → Duration and type of journey, security, insurance
- **Routing and scheduling** → Order size, transport capacity, destination network, delivery frequency

Quality Management

In quality management, you balance costs against quality standards. What type of storage or warehousing infrastructure is needed to deliver the type of quality that customers expect? With fresh food or other perishables, the science of storage quality and storage life needs to be finely tuned and monitored. Environmental, security and access concerns are all part of the quality management process. What is the optimum specification that balances all the various requirements? How about the economics? Having too many warehouses and delivery depots is uneconomical, while too few may lead to underperformance in store delivery. In another example, the buying function may find a new, lower cost supplier, but quality management must evaluate the quality risks associated with such a potential switch.

You also need to understand and analyze the value and cost of preventative measures that ensure quality such as training, appraising incoming merchandise, supply chain processes and inspections. *How much of this responsibility can be placed on suppliers versus internal quality assurance procedures? How do you measure product quality under- or overperformance?* Measuring and monitoring must also be integrated with quality expectations to understand the effect of changes.

GOALS	METRICS	DIMENSIONS	
Spoilage (\$/%)	Quality Tests (#)	Fiscal Month	Carrier/Distributor
Returns (\$/#)	Quality Scores (#)	Year	Distributor/Carrier Type
Quality Score (#)	Quality Test Costs (\$)	Quarter	Carrier
	Claims (\$/#)	Month	QC Defect Issues
	Defects (\$/%)	Week	QC Defect Issues
	Strickage (\$/%)	Organization	QC Tolerance Standards
	Performance Scores (#)	Division	QC Tolerance Ranges
	Issues Count (#)	Channel	Performance Issue Type
		Store	
		Product Hierarchy	
		Product Category	
		Product Group	
		Product Line	
		Supplier/Vendor	
		Vendor/Merchant	
		Supplier/Manufacturer	

FUNCTION	DECISION ROLE	PRIMARY WORK	CONTRIBUTORY	STATUS
Quality Management	Executives Professionals	*	*	
Supply Chain	Executives Professionals	*	*	
Audit	Executives Professionals	*		*
Purchasing	Executives Professionals		*	*
Inventory	Professionals		*	
Distribution	Professionals		*	
Logistics	Professionals		*	
Store/Channel	Executives Professionals		*	*
Finance	Executives			*
Merchandising	Executives			*

Supply Chain Efficiency

Supply chain efficiency management looks at ways to improve operations and supply chain. This means looking for performance outliers and understanding why they occur. There are three areas where well designed, comparative performance metrics can make the difference between a follower and a leader:

- Internal operational processes
- External developments and trends
- Competitive benchmarking

Your internal operational processes are most familiar to you, and the easiest to analyze. For example, by looking at supply chain cost per order value as a benchmark, an unusual increase in this index may indicate two things: Either these costs have increased, or order values have decreased.

You must determine whether supply chain efficiency has gone down, or if sales have slumped. Alternatively, from a home delivery and last-mile perspective, costs per order may be too high, yet a necessity from a competitive customer service perspective. In effect, the service strategy requires that this cost be subsidized by the retailer.

Taking advantage of external developments and trends requires re-assessing suppliers, not only from a buying cost perspective, but also in terms of how this impacts the supply chain. *By shifting to a low-labor-cost supplier for cheaper merchandise, what does this do to shipping costs, supply chain efficiency and customer satisfaction? In general, how do cost savings affect the supply chain? For example, do third-party cost savings come at the expense of supply chain efficiencies?*

Failing to follow up on these external efficiency developments may jeopardize your competitive position. Beyond this focus, many leading businesses extend their monitoring activities to their competitors. Simple comparative benchmarks such as sales per employee, sales per store, sales per square foot, average transaction size by channel, inventory levels, number of warehouses and others will help identify performance differences. With these identified, you can determine the actions you need to take.

GOALS	METRICS	DIMENSIONS	
Supply Chain Failures (#)	Avg Cost per Mile (\$)	Fiscal Month	Product Hierarchy
Supply Chain Cost (\$/%)	Min Cost per Mile (\$)	Year	Product Category
Costs per Shipment (\$)	Max Cost per Mile (\$)	Quarter	Product Group
	Failed Shipments (#)	Month	Product Line
	Stock-outs (#)	Week	Production Process
	Late Deliveries (#)	Organization	Work Function
	Supply Chain Savings (\$)	Division	Supply Chain Step
	Supply Chain Initiatives (#)	Channel	Initiatives Type
	Time to Market (#)	Store	

FUNCTION	DECISION ROLES	PRIMARY WORK	CONTRIBUTORY	STATUS
Supply Chain	Executives Professionals	*	*	
Distribution	Executives Professionals	*	*	
Logistics	Executives Professionals	*	*	
Purchasing	Executives Professionals		*	*
Inventory	Professionals		*	
Store/Channel	Executives Professionals		*	*
IT/Systems	Executives Professionals		*	*
Finance	Executives		*	*
Merchandising	Executives		*	*

Sourcing
 Supplier Performance Rating (#)
 Shipping Performance Score (#)
 Lead Time (#)
 Responsiveness Rating (#)
 Supplier Claims (\$/%)
 Contract Quantity (#)

Distribution & Logistics
 Store Deliveries on Time (%)
 Distribution Cost (\$)
 Cost per Mile (\$)
 Damaged Units (\$)
 Deliveries (#)
 Units Shipped (#)
 Carrier Performance Scoring (#)

Dimensions
 Fiscal Year/Month/Week
 Region/Territory
 Organization
 Product/Category
 Supplier/Vendor
 Carrier/Distributor
 Carrier Region
 Shipment Type/BOL #

	Total Year	Q1	Q2	Q3	Q4
Lead Time (#)	---	---	---	---	---
Responsiveness Rating (#)	---	---	---	---	---
Supplier Claims (\$/%)	---	---	---	---	---
Cost per Mile (\$)	---	---	---	---	---
Damaged Units (\$)	---	---	---	---	---
Deliveries (#)	---	---	---	---	---
Units Shipped (#)	---	---	---	---	---

The Sourcing and Distribution and Logistics decision areas illustrate how the Supply Chain function can monitor its performance, allocate resources and set plans for future financial and operational targets.