



“Corporate success will increasingly be dictated by how well a company can control its supply base, create continuous performance improvement, and identify and mitigate supply bottlenecks and liabilities.”

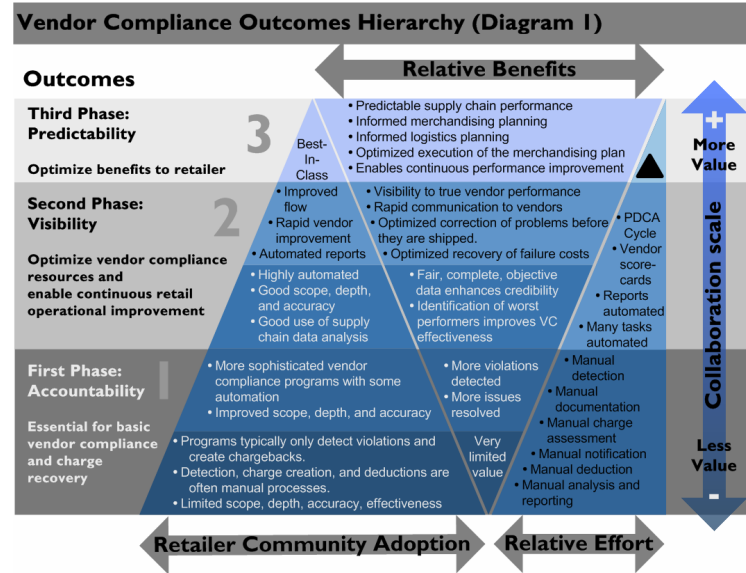
Beth Enslow
Vice-President,
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Aberdeen Group

For retailers, having the right product at the right place and time has never been more important. It often comes down to two simple questions for the retailer: “How do I know if my supply chain is doing what it takes to execute my company’s merchandising plan?” and “What can I do to improve supply chain execution of the merchandising plan?”

Best-in-class Vendor Compliance programs enable retailers to:

- Know when performance does not meet expectations,
- Recover the cost of correcting performance failures,
- Communicate supply chain performance information,
- Anticipate future supply chain performance,
- Provide stakeholders with complete and accurate performance history for planning and decision-making,
- Implement ongoing supply chain improvement programs.

Effective vendor compliance programs provide accountability, visibility, and predictability, as indicated in the **Vendor Compliance Outcomes Hierarchy** diagram (Diagram 1, right). The gray bands indicate three general levels of compliance programs. The blue pyramid on the left, labeled Retailer Community Adoption, indicates the universe of retailers with compliance programs. The relative number of retailers is indicated by the size of each blue section. The upside-down pyramid in the middle, labeled Relative Benefits, indicates the return that retailers gain from compliance programs at each level. The relative benefits are indicated by the size of each blue section. The triangle on the right, labeled Relative Effort, indicates the human resource cost to execute vendor compliance programs at each level. The arrow on the right indicates the collaborative value for supply chain stakeholders that can be realized as more capable and robust compliance programs are implemented.



Accountability is best supported when software processes are written to automatically review and compare each transaction to expectations, in order to detect failures. Manual detection of violations is normally less accurate, less complete, and more costly than automated detection.

Visibility is created by communicating the results of the analysis to supply chain stakeholders and by supply chain data that is easily accessible. Failures should be automatically e-mailed or otherwise made available to appropriate stakeholders, who must be able to assess their performance relative to supply chain expectations, in order to make operational adjustments necessary to improve. Photos and images provide undeniable proof and facilitate behavioral change. Visibility into accurate and complete supply chain data provides retail merchants a view of the effectiveness of their merchandising plan that is not obstructed or skewed by subjective, anecdotal and often inaccurate assumptions as to the causes of supply chain performance failures.

Predictability is achieved by analyzing historical vendor performance in order to anticipate future vendor performance. This enables the retailer to benefit from the supply chain data warehouse in the short term, while allowing the longer term behavioral change to occur via accountability and visibility. Using predictability, the retailer is able to optimize execution of the merchandising plan even when some vendors are expected to not comply with the plan. Predictability is leveraged by making adjustments to orders by increasing or decreasing the quantity of items ordered based on historical vendor shortages and overages, respectively, and by ordering sooner or later, based on historical vendor late or early shipping habits.

Measuring Performance is Simply the First Essential Step

Retailers realize the benefits of a Vendor Compliance program almost immediately after implementation. When the program includes effective communication of performance metrics and the intent to recover the cost of performance failures, vendor performance improves rapidly.

The value is definitely there. A study by Aberdeen Group in December 2002 found that a company could increase its supplier performance by 26.6 percent, on average, just by incorporating a formal performance measurement program. The benefits increased to over 60 percent improvement in the cases where companies shared that information with their suppliers, rather than only using that information internally. And the companies that used automation tools to support their supplier performance initiatives achieved 57 percent greater improvement over companies without such tools. Extended supply chain visibility is the first step to achieving this level of benefit by providing the granularity and the synchronized view that enables suppliers and customers to work together to improve supply-side processes.¹

¹ Nikki Baird *The Reinvention of Supplier Performance Management* (Supply and Demand Chain Executive, March 2006)

Vendor Compliance Activities

Vendor compliance is accomplished by six general activities designed to capture supply chain data and use this data to manage supply chain behaviors (Table 1, right):

- Capture data from disparate sources and combine, sort, group, filter and configure it to facilitate detection of violations.
- Compare vendor fulfillment activity to the expectations or rules in the retailer routing guide.
- Capture events that indicate vendor shipping failures or rule violations.
- Collect the digital documents, photos and data necessary to provide clear, undeniable defense of violations.
- Provide the available information to the appropriate supply chain stakeholders, in the most helpful format.
- Notify vendors when they violate a rule, to provide them the greatest possible opportunity to prevent future violations.

Detect, Defend, Document, and Inform with Accurate and Complete Data

When considering the data required for a best-in-class vendor compliance program, well-designed rules and associated penalties are essential. The supply chain data elements necessary to measure performance include, but are not limited to, purchase order header and details, receipt header and detail, and ASN and freight data are also essential. Additional data must be gathered through physical audits or radio frequency audits. Other important data can be gathered from problem shipment or Return-to-Vendor areas. Digital photos of problem shipments and scanned documents provide valuable evidence to support detection of violations.

Compliance metrics that cannot be measured or verified are ineffective. Therefore, it is important that compliance standards reflect supply chain objectives and the availability of the data necessary to measure performance against those standards.

Where is the Data?

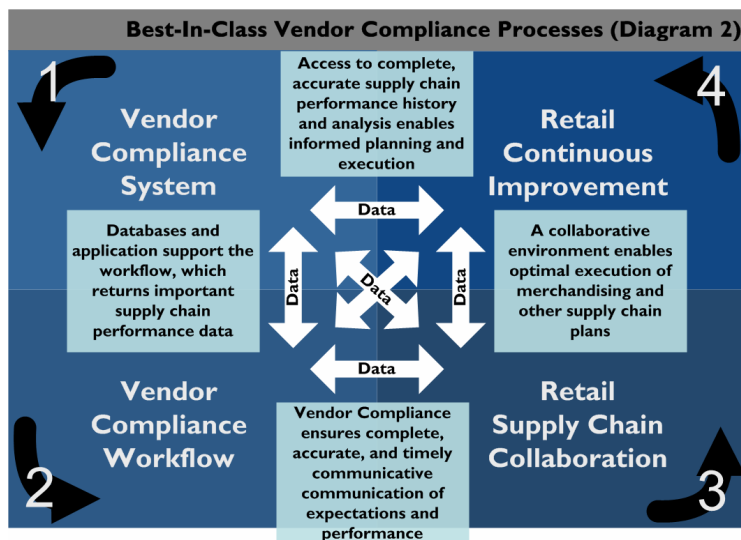
In most organizations, retail or otherwise, data is located on different personal computers, mainframes or database servers that preclude easy access by all many end users without the assistance of an MIS specialist. Purchase orders reside in a PO management system, while receipts are held in a receiving system, and other information may be in Excel spreadsheets or Access databases. Information is also spread among different departments, or in the minds of the distribution center people who deal with day-to-day issues. Normally, if the information exists, it is probably in unrelated data silos and is, therefore, very difficult to access, integrate, and analyze.

All the Data, All the Time

A competent vendor compliance system captures and consolidates disparate data that is essential for comparing vendor performance with retailer expectations. The data must be accurate, current, and complete. The vendor compliance system must facilitate access to the data. The result is a supply chain data warehouse that is a single source of information that is relevant to end users and decision makers throughout the enterprise. Convenient access to reliable supply chain information encourages the use of that information to support supply chain improvement activities.

Vendor Compliance Optimization Processes

A best-in-class Vendor Compliance Optimization solution enables retailers to implement four supply chain processes that are essential for deriving maximum value from vendor compliance (Diagram 2, left):



- Vendor Compliance System - The software, hardware, and database infrastructure that will support vendor compliance activities.
- Vendor Compliance Workflow - The integration of human activities with the Vendor Compliance System that will execute the Vendor Compliance program.
- Retail Supply Chain Collaboration – Planning, communication, and cooperation that facilitate optimal supply chain execution.
- Retail Continuous Improvement – Leveraging the performance data produced by vendor compliance optimization, to identify supply chain execution failures and successes, and adjust merchandising and other supply chain planning and execution.

“Over the longer term, those companies and supply chains that learn how to maximize the use of information to get optimal performance from the other drivers will gain the most market share and be the most profitable.”

Michael Hugo, *Essentials of Supply Chain Management*, Page 36 (Wiley, March 2006)

Essential Vendor Compliance Activities (Table 1)
Capture performance data
Compare performance to expectations
Detect performance failures
Defend detection with accurate, complete, and objective evidence
Document failures and evidence
Assess the costs of failures and commensurate expense offset penalties or chargebacks
Communicate performance and evidence

The Vendor Compliance System Roadmap (Table 2, below left) illustrates the phases for implementing a system necessary to support a Vendor Compliance Program and a simplified, linear Vendor Compliance process flow. Precise processing analysis of the supply chain data is as

Step I	Step II	Step III	Step IV	Step V
Gather supply chain data	Process and analyze data	Assess vendor performance	Convert violations to charges	Communicate performance to stakeholders
Purchase Orders Item Catalog Advance Shipment Notifications Freight Data Receiving Data RF Audits Manual Audits Accounts Payable History	Fulfillment Rules (derived from routing guide) ASN Analysis Freight Analysis Receipt Analysis Audit Processing Accounts Payable Processing	1) Automated data analysis produces audits 2) RF and Manual Entry produces audits 3) Audits include questions and answers (issues) 4) Audit answers indicate compliance 5) Non-compliant answers are translated into violations	1) Automated violation analysis validates violations 2) Validated audits create charges based on retailer rule structures. 3) Charge analysis enforces exemptions and other constraints 4) Validated charges to AP for deductions	1) Accurate, complete supply chain history (audits, violations, charges, purchase orders, receivers, etc.) on-line or via reports. 2) Scorecards, violation details, evidence (pictures and document scans), and charges are passed to vendors via email or fax. 3) Performance analysis on-line or via reports.

essential as the quality of the data. Inaccurate or unreliable data processing and analysis will create invalid performance data, violations and charges. Invalid system output will cause the Vendor Compliance program to lose credibility with stakeholders.

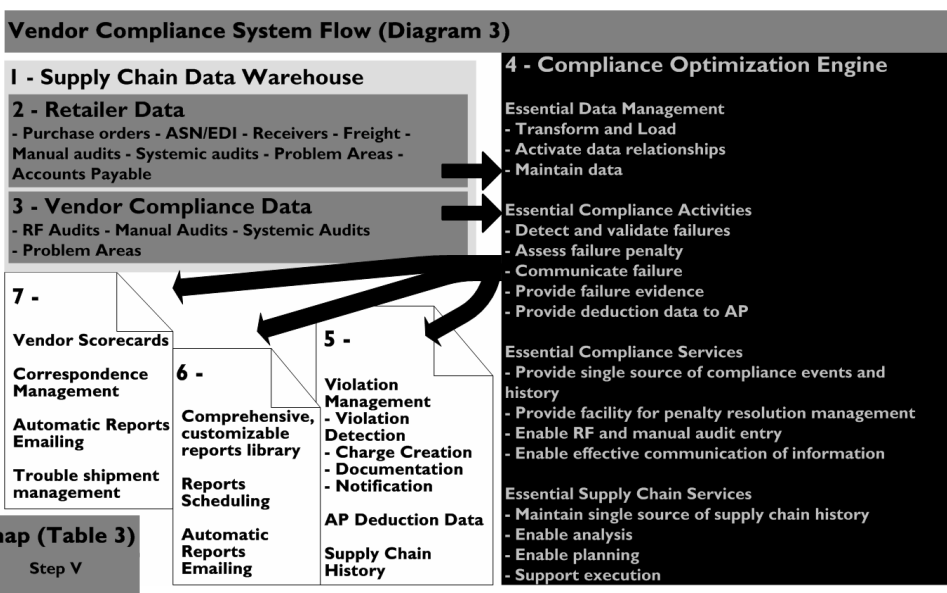
The Vendor Compliance System Process (Diagram 3, below right) illustrates the relationships between the system resources and activities. Supply Chain data moves back and forth from the retailer and the Vendor Compliance system into the Supply Chain Data Warehouse. The Vendor Compliance Optimizer describes data processing activities. Output from data processing is indicated by the three document graphics in the lower half of the flow diagram.

The Vendor Compliance Roadmap (Table 3, below left) illustrates the phases for implementing the Vendor Compliance Program and provides a linear view of the Vendor Compliance process. The intent is to create fulfillment rules that support retailer objectives, and are fair and reasonable for vendors. Purchase orders must be created and maintained to support the fulfillment rules. Automated auditing must be optimized to eliminate human intervention whenever possible. The primary human activities include manual and RF audits of inbound

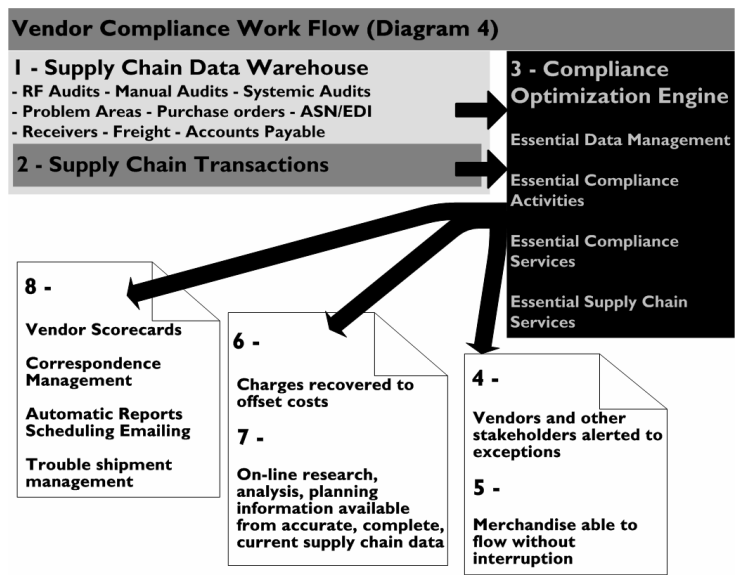
shipments and management of the vendor compliance program. Effective vendor compliance management will leverage the performance data available from the vendor compliance system to optimize collaboration and performance among supply chain stakeholders.

The Vendor Compliance Process Flow (Diagram 4, below right) illustrates the relationships between vendor compliance activities and systems. A well-designed and implemented Vendor Compliance program will capture performance history across a wide span of supply chain activities. It will detect all violations and provide rapid feedback to supply chain stakeholders to maximize opportunities to correct supply chain performance failures before they are repeated.

Step I	Step II	Step III	Step IV	Step V
Publish rules and routing guide	Order fulfillment	Audit Processes	Detect and communicate	Optimize vendor compliance
Operational Requirements Fulfillment Expectations Compliance Rules Routing Guide to Vendors	Buyer creates PO Compliance system captures PO Vendor sends ASN rCMS captures ASN Vendor ships PO DC receives shipment Freight and receiving data to VC system	VC application performs automated audits RF Audits via VC application Manual Audits via VC application Freight Bill entry into VC application Trouble Freight entry into VC application	VC app creates charges from validated violations VC app passes charge deduction file to AP VC app provides violation and charge details, and supporting images and documents to vendors and other stakeholders via automatic reports	VC app provides visibility: • Supply chain data • Vendor scores • Data analysis • ASN accuracy • Fill-rate • On-time shipping • Trouble freight VC application provides supply chain performance history to anticipate vendor performance, optimize the merchandising plan, and optimize execution



Performance is communicated rapidly and accurately. Vendors are charged for the cost of violations, as indicated in the routing guide. The Supply Chain Data Warehouse becomes a valuable resource for managing supply chain improvement and planning.



Continuous Supply Chain Improvement

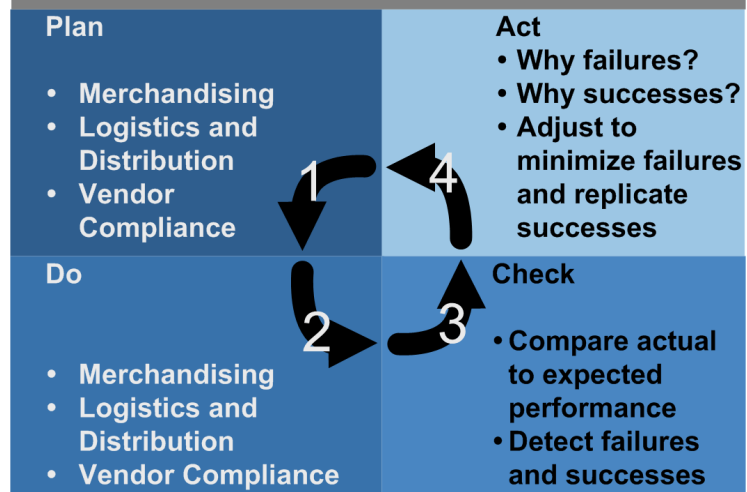
The Retail Supply Chain Continuous Improvement Roadmap (Table 4, below left) indicates phases of a continuous improvement model implemented to leverage a best-in-class vendor compliance program.

Retail Supply Chain Continuous Improvement Roadmap (Table 4)				
Step I	Step II	Step III	Step IV	Step V
Plan	Prepare	Execute and Analyze	Communicate	Adjust plans
Retail Enterprise Objectives	Supply Chain Data Warehouse	<ul style="list-style-type: none"> Execute plans Capture performance data Compare performance to expectations Detect exceptions Defend detection Publish results Alert supply chain stakeholders 	<ul style="list-style-type: none"> Accountability Violations Chargebacks or Expense Offsets Vendor Scorecards Visibility On-line Information Reports Automatic Reports and Emailing Predictability Performance History Vendor Alerts Supply Chain Alerts 	<ul style="list-style-type: none"> Analyze Supply Chain Performance Adjust Merchandising Plan Adjust Vendor Compliance Plan Adjust Logistics and Distribution Plan Return to Step I and Repeat
Supply Chain Objectives	Supply Chain Expectations, Rules, and Routing Guide			
Merchandising Plan				
Vendor Compliance Plan	Enhance capabilities of merchandising, vendor compliance, and supply chain to support plans			
Logistics and Distribution Plan				

The Supply Chain PDCA Cycle (Diagram 5, right) indicates how supply chain vendor compliance activities relate to the traditional PDCA cycle:

1. Develop merchandising, logistics, and distribution plans to support corporate objectives,
2. Execute the merchandising and other supply chain plans,
3. Analyze performance and identify the causes of failures and successes,
4. Act to adjust the merchandising, vendor compliance, and supply chain plans to minimize failures, replicate successes, and compensate for anticipated exceptions.

Supply Chain PDCA Cycle (Diagram 5)



In a retail enterprise, planning should include the merchandising plan, the logistics and distribution plan and the vendor compliance plan.

Planning and analysis is enabled by the creation of a comprehensive, complete, and accurate supply chain data warehouse that can be sustained and updated at real-time or near real-time intervals. The supply chain data warehouse must include all relevant supply chain data. Consolidating this data can be challenging because it is typically created and stored in disparate locations within the retail IT infrastructure.

An essential planning activity is determining supply chain objectives and translating them into measurable rules. Supply chain objectives must be based on and support the objectives of the retail enterprise. The rules that are derived from the supply chain objectives must be reasonable for the vendor community to implement and must support the partnership between vendors, other supply chain stakeholders and the retail enterprise. After developing supply chain objectives and rules, it is a good idea to circle back and ensure that the supply chain data warehouse includes all the data necessary to measure compliance with the rules.

Step four of the PDCA cycle leverages vendor compliance outcomes: Accountability, Visibility, and Predictability to provide supply chain stakeholders with the best possible opportunity to make informed decisions for improving performance. Ongoing improvement is achieved by leveraging supply chain data to enhance collaboration and improvement.

Profiting from Continuous Improvement in the Retail Supply Chain

A vendor compliance program can be a powerful tool for optimizing the flow of merchandise through the supply chain. However, a competent compliance program that includes a comprehensive supply chain data warehouse enables ongoing performance improvement. Supply chain visibility enables the retailer to quickly detect and resolve vendor shipping exception. It also provides historical data for the retailer to anticipate vendor behavior, address problem behavior before it happens and adjust ordering decisions accordingly.

About Compliance Networks, LLC

Compliance Networks delivers retail supply chain solutions that enable retailers to align their vendor community with the strategic goals of the retail enterprise to systematically eliminate costs and improve overall profitability. The result is a consistent, predictable, and more profitable supply chain. Compliance Networks is headquartered in Sugar Land, Texas, and maintains an office in Little Rock, Arkansas. Compliance Networks' customers include leading retailers such as Kohls, Burlington Coat Factory, Pep Boys, The Sports Authority, Elder-Beerman/Bon-Ton Stores, and Gottschalks Stores. For more information, visit www.compliancenetWORKS.com.



“Test fast. Fail fast. Adjust fast.”

Tom Peters

The analysis, planning, and collaboration resources available from a best-in-class vendor compliance program directly support continuous supply chain improvement. An effective method can be derived from the Plan-Do-Check-Act (PDCA), or Shewhart, Cycle. Although the PDCA cycle was originally designed as a quality-improvement method for manufacturing enterprises, it translates directly and effectively to retail enterprises.

“Companies that adopt best-in-class supplier performance management practices are two to three times as likely to achieve supplier on-time delivery and first-time fill rates that are above the market average.”

Beth Enslow
Vice-President, Enterprise Research, Aberdeen Group

measure compliance with the rules.

“...we stand fast on our contention that companies can add as much as 8 points of new profit to a financial statement through supply chain improvements.”

Supply Chain Management Review, January 1, 2006