



The Fast Track to Lower Supply Chain Costs and Improved Customer Responsiveness: New Requirements for a “Solution-In-A-Box” for Consumer Goods Suppliers

>> Compliments of Microsoft Business Solutions and MaxQ Technologies





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>> Abstract

The consumer goods market is undergoing a fundamental change, because consumer purchases are increasingly driven by price instead of brand loyalty. This trend, fed by global competition, shorter product lifecycles and lean economic conditions, is creating intense price pressure at the retail level—and downward pressure on costs through the entire consumer goods channel.

To push down costs, retailers are bidding suppliers against one another, and are even compelling suppliers to assume responsibility for end-customer sales with such initiatives as collaborative planning and vendor-managed inventories. To stay competitive, suppliers must adapt to these new demands—reducing their own costs and improving their ability to predict and respond to changes in end-customer demand.

Supply chain planning and management (SCM) automation has gradually emerged and matured as a solution to this dilemma – at least among large, well-heeled suppliers. For many major players, SCM automation has been shown to reduce supply chain costs by as much as 65%—allowing them to gain a strong position as low-cost suppliers. It is the small and mid-size suppliers that now face the challenge.

But the solutions that work for tier-1 Consumer Goods (CG) suppliers are simply unsuitable for smaller organizations. They are too complex and expensive. The other alternatives tend to be from-the-ground-up proprietary systems, generic horizontal solutions that lack CG-specific functionality, or a series of “best-of-breed” applications that are difficult to integrate and scale.

To stay in the game, small and medium-size CG suppliers need a standard SCM solution that is complete, but also simple and affordable. It must be pre-integrated out-of-the-box, have the functionality CG suppliers need to compete efficiently, provide connectivity, and be simple to implement, use and maintain.

This paper defines the requirements for this standard or “mainstream” Supply Chain Planning and Management solution for CG suppliers.



>> I. SCM is becoming a requirement in the CG market

Cost-squeezing in the consumer goods market is here to stay, so are steadily increasing inventory availability and service demands by the retailer. The response to this pressure by retail giants such as WalMart and Target has set the trend in the larger retail community. One recent study of nearly 150 companies worldwide finds that the supply management strategy of leading companies includes finding ways to use supplier capabilities to help drive sales¹.

These retail operators are driving down costs and enhancing their own market viability by imposing greater responsibilities on suppliers, including...

- > **CPFR (collaborative planning, forecasting and replenishment)**
- > **EDI, ASN, and UPC labeling**
- > **Customer specific mappings**
- > **Customer-specific order processing**
- > **Vendor-managed inventory**
- > **Commitment-to-ship dates**
- > **Product analysis driven directly by consumer sales and use patterns**

And many of these requirements, such as the new EAN UCC 13 digit bar code and secure ftp over the internet (EDIINT AS2), are gradually becoming industry standards².

Many major suppliers that have met this trend with aggressive supply chain management strategies have seen their investment pay off. Best -in-class performance studies indicate that, when deployed efficiently, Supply Chain Management delivers a powerful advantage. To cite just one study³:

- > **% of on-time delivery of orders: up 14%**
- > **Inventory (months): reduced by 60%**
- > **Cash-to-cash cycle: reduced by 62%**
- > **Net asset turns: up by 280%**
- > **Total Supply Chain Management cost (% of revenue): reduced by 75% to 80%**

With this kind of market momentum, the need for smaller CG suppliers to adopt SCM automation is no longer a matter of debate. The big issue is "when?" Eventually, it will be an "adopt or die" decision, but those companies that launch SCM solutions early in the trend have an opportunity to leverage automation as a substantial competitive advantage—to secure greater customer loyalty, increased market share and enhance profitability. However, among the list of choices, none have really met the criteria. What the market needs is a "Standard" solution. One that will grow and evolve, satisfying the emerging needs without the drawbacks of the current solutions.

So, for the forward-looking CG supplier, the answer to "when?" is now. The next question is "how?"

>> II. Mid-tier CG suppliers are feeling the squeeze

In the “commoditization” of the CG market, small and mid-size organizations are caught between two sets of pain points: The pain points created by rigorous customer supply chain requirements, and the pain points of SCM implementation itself.

Painful compliance with customer requirements

The escalating requirements of large retail customers create painful challenges for the CG supplier who is still tied to conventional supply chain processes. Those challenges include:

- > **Predicting and responding to customer demand.** This is the most consistent and serious pain point, which leads suppliers to constantly struggle with either too much or too little inventory.
- > **Accurate Inventory information.** Outdated systems make it difficult to identify merchandise that is moving slowly, is out of stock—or is soon to be out of stock.
- > **Back-ordered goods.** With each step along the supply chain, by attempting to achieve just-in-time inventory, suppliers have difficulty getting needed goods from vendors.

Left unresolved, these issues will increasingly lead to discounts, lost orders, higher inventory costs and lost customers.

Painful SCM choices

While mid-tier CG suppliers need to alleviate customer compliance pains, they simply can't bear the expense and complexity (the pains) of SCM solutions typically adopted by larger competitors:

- > **Tier 1 proprietary solutions are too expensive and take too long to deploy**
- > **Packaged horizontal solutions lack essential CG-specific functionality and thus require extensive customization**
- > **“Best-of-breed” standalone systems don't integrate easily and lack seamless automated processes for rapid response, and simple, end-to-end adaptability and scalability**
- > **Traditional vertical market systems are built on obsolescent technologies and are unlikely to be able to keep up with rapidly evolving market and technology demands**

The majority of upper-tier organizations (companies with annual revenues of \$500 million or more) in consumer goods and other industries have committed to Supply Chain Management, as noted in a recent survey by Forrester Research, Inc.⁴ Just as important, the same survey reveals that the budget for a Supply Chain Management project among these organizations averaged between \$4.6 million and \$7.6 million.

Confronted with such cost statistics, many smaller CG suppliers may assume that SCM automation is beyond their reach. For these companies, business reality includes limited capital and tight cash flow, lean IT resources, and an inability to accommodate the business disruption of a 6 to 18-month system deployment. To bring effective and affordable automation into the realm of small and medium-size CG suppliers, SCM systems need to be tightly pre-packaged, simple to install and manage, and specifically designed to meet the challenges of the CG marketplace.

>> III. Defining the “standard” CG SCM solution for mainstream suppliers

Given their capital and IT resource limitations, mid-tier suppliers need an “out-of-the-box” SCM solution that quickly empowers them to streamline supply chain processes and meet the price and service demands of retailers. The ideal solution would incorporate important characteristics on several key levels:

Required strategic attributes

First, to accommodate the lean business environment and primary compliance pain points of the supplier, the standard SCM system would:

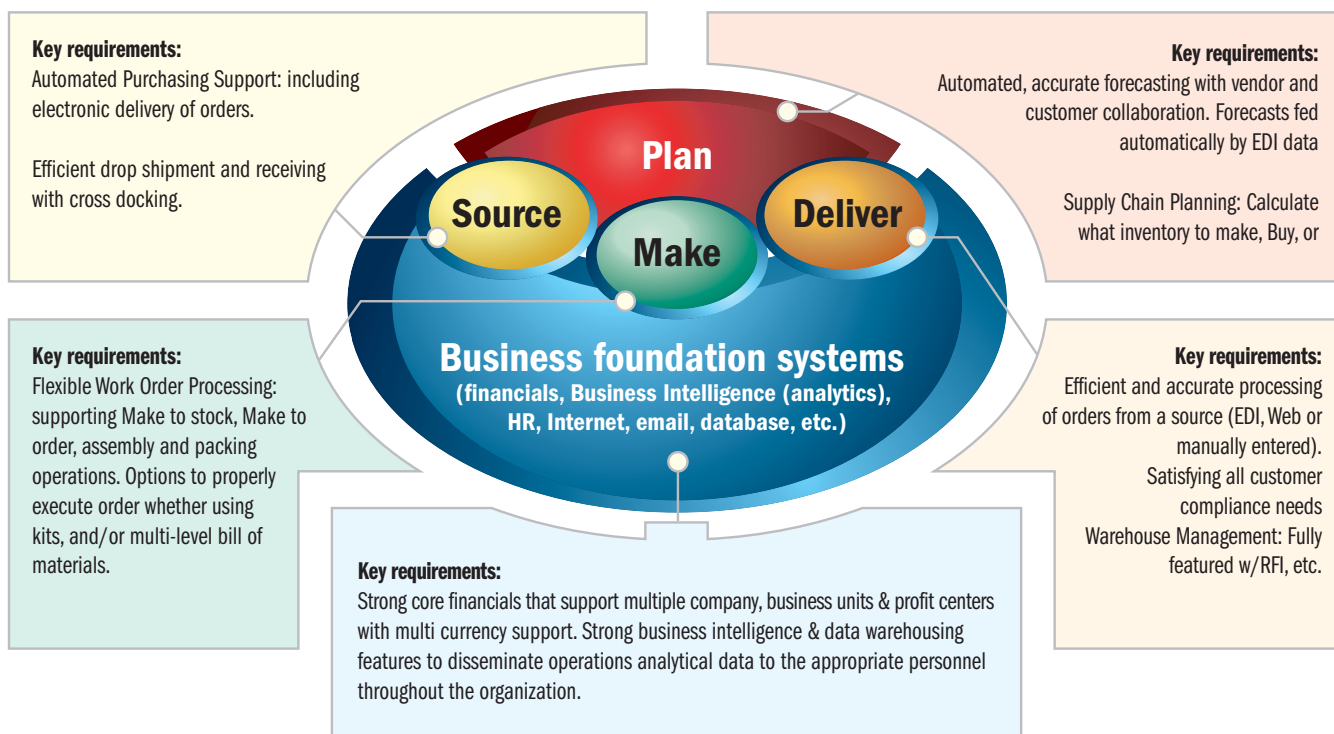
- > **Provide accurate and easy-to-access information about customer and supplier requirements**
- > **Automate demand planning and forecasting**
- > **Automate the inventory replenishment and fulfillment process**
- > **Provide the wide range of seamlessly integrated functionality that may be needed**
- > **Be simple to integrate, use and maintain**
- > **Offer a low total cost of ownership (TCO)**
- > **Provide simple upgrades to maintain customer compliance and react to changing business needs**
- > **Include easy-to-use tools for cost and performance analysis, to enable management to continually measure and adjust supply chain efficiencies – easily, and across a wide variety of metrics, including:**
 - Cost/profit per order processed
 - Cost of supply chain management as a percentage of revenues
 - Error rates
 - Inventory turns and inventory costs
 - Employee productivity
 - Rate of overhead growth relative to increase in order volume
 - Recognition of low-yield/high-yield items

Together these attributes lower the adoption threshold for mid-size suppliers by driving out excessive costs and complexity, and by increasing automatic business utility.

Required functionality

Much has been written about the functions that constitute a complete SCM solution, along with the processes by which they interact – most of it discussed in technical detail for the consumption of technical professionals. Such details shouldn’t have to be of any concern to an average supplier. Ideally, the underlying operational complexity of a standard system would be made simple and transparent for the management and users in mid-tier organizations.

What matters is that the system is a complete package, and that all primary functions (Plan, Source, Make and Deliver) are fully integrated and provide a simple, intuitive interface with which to view and manage the processes specific to the distribution of consumer goods. The system should also enable suppliers the ability to upgrade to new functionality without the need for costly custom integrations. Further, to enhance overall enterprise efficiency, the system should allow the real-time sharing of critical data with other business applications, including CRM and financials. To enable such simplicity and seamless functionality, an “out-of-the-box” solution would incorporate the following:



The entire “Plan, Source, Make, and Deliver” process should have integrated work flow, the ability to set up each step in the process to company specific needs, so that manual steps will not be required in the process unless the CG company wants human intervention.

>> IV. How Microsoft Business Solutions and MaxQ meet the standard

The above-described ideal Supply Chain Management approach is a vision pursued and achieved by Microsoft Business Solutions. Microsoft Business Solutions now offers a broad array of robust and integrated “standardized” Supply Chain Management solutions—all designed for small and medium-size firms. For consumer goods suppliers, Microsoft business partner MaxQ Technologies provides the specific functionality that makes the Microsoft Business Solutions SCM suite a complete, out-of-the-box system for CG suppliers—a system that allows mid-tier players in this market to dramatically reduce supply chain costs and comply with the demands of retail customers.

The power to “sense and respond” requires integration at the process level

MaxQ Technologies adds the critical dimension that is missing in most consumer goods SCM solutions—demand management (which includes demand planning and forecasting) coupled with powerful, pre-designed analytics (business intelligence) capabilities. This answers the mid-tier supplier’s urgent need to provide sell-through value to important retail customers. As part of the Microsoft Business Solutions standard SCM solution for CG suppliers, the MaxQ demand management and analytic modules empower suppliers to accurately sense customer demand. Because this demand (“sense”) data is shared at the process level in the system (instead of the database level), it is intelligently and automatically applied among the source, make and deliver functions. This eliminates manual interpretation and re-entry of the data, and enables the demand fulfillment (“response”) to be on time, accurate and automatic.

A simple and seamless end-to-end solution

The CG Supply Chain Management suite from Microsoft Business Solutions and MaxQ draws on market-proven applications that cover every major Supply Chain Management process, from demand management, to inventory management, to purchase order management all linked seamlessly to robust ERP. They can also link to other vital business applications from Microsoft Business Solutions, such as CRM and Human Resources. Because the system is pre-integrated, it installs easily and is simple for users to learn. This typically shortens the time for complete deployment to less than 120 days.

Value that extends through the enterprise

This complete consumer goods SCM solution has been finely integrated within the Microsoft operating environment, and is thus capable of seamlessly sharing data with Microsoft Office applications, including Outlook, Word and Excel, as well as Microsoft .NET. This places Supply Chain Management processes within an environment that is proven and already familiar to users in organizations at all points in the supply chain. In this integrated enterprise environment, real-time inventory and customer demand data can be easily translated into spreadsheets, sales contact reports and other valuable reporting and analysis tools.

Establishing the standard for affordability

The use of proven applications in an established integrated operating environment reduces license and deployment costs to a fraction of what has been typical in large Supply Chain Management projects – and puts the benefits of Supply Chain Management within the reach of small and medium-size CG suppliers. And to further clear away cost obstacles, Microsoft Business Solutions even provides financing of complete solutions, through the Microsoft Capital(R) program.

>> V. Case Study: Fairfield Processing brings polyester product distribution into a new age

Established in the 1940's, Fairfield Processing manufactures the Poly-fil[®] line of polyester products that are used in home sewing, craft and other industries. Employing over 250 people, the company is based in Danbury CT, with manufacturing and shipping facilities in Newtown and Brookfield CT, Atlanta GA and Clearfield UT. Fairfield counts among its customers such retailers as WalMart, RiteAid and Hancock Fabrics.

A wish list of updated capabilities

With the ever-increasing demands of its customers and the market, Fairfield found that its outdated and highly customized UNIX system had become an obstacle to continued growth and profitability. Operating in an extremely competitive market, company management decided that technology innovation and enhanced customer service were essential to remaining competitive. They needed to:

- > **Replace an antiquated, highly customized legacy system**
- > **Adopt an automated system that centralized order processing and invoicing, but could also handle shipping from multiple, remote distribution centers**
- > **Have the ability to rate shop for best way and lowest cost freight, capture the actual cost upon shipment – then invoice the quoted freight**
- > **Efficiently generate and distribute over a hundred management, sales and cost analysis reports monthly to enable staff to better manage business operations**
- > **Provide remote order entry capability for sales people**

Two names, one complete solution

Fairfield chose MaxQ Technologies, Inc. to manage the transformation, because of its decades of experience in the industry, as well as the availability of on-staff experts who would work with Fairfield for the long term. To help Fairfield accomplish its objectives, MaxQ delivered a distribution management system that leveraged the Microsoft Business Solutions platform to provide a completely automated, end-to-end solution. The system included Microsoft Business Solutions integrated distribution system and its standard Financial and e-Commerce applications. In addition, the MaxQ Technologies applications in the system included Freight Manifesting, eProphet for Distribution, and other MaxQ applications that streamline operations.

SYSTEM COMPONENTS:

Microsoft Business Solutions

Integrated financials

Integrated distribution system, including eCommerce Gateway EDI Edition and Advanced Shipping Management

MaxQ Technologies

Freight Manifesting

eProphet Business Intelligence

Charge It

Advanced Cash Application

AP/PR Laser Checks

Smarter, streamlined business operations – through automation

Today, Fairfield is operational on a state-of-the-art, completely integrated distribution management system. Fairfield processes thousands of orders every day, and its largest customers demand that orders be handled via EDI. The new system has enabled the company to streamline order processing and have an integrated EDI, distribution and financial management system. Now the company can process orders with virtually no human intervention and can meet customer expectations for efficient, error-free electronic processing of orders.

According to Joan Fleischman, Director of Information Systems, Fairfield, "order processing has gone from an average of three days to less than 48 hours, with the majority of orders shipped from our distribution centers within 24 hours. EDI and special rush orders can reach our distribution centers within minutes and be on the way to customers that same day." She added that despite an increase in orders, the new system allowed Fairfield to abandon plans for adding two or three employees to its order processing team.

An integrated and highly efficient freight manifesting system allows the company to manage a high volume of packages, while controlling costs. It automatically calculates carton weights, shopping for rates, and quoting freight costs at the same time it creates the sales order, eliminating the need to manually re-key data. As a result, Fairfield has reduced the time required for shipping processes by 100 to 200 man-hours per month. "Order accuracy has improved dramatically with regard to inventory and routing and freight issues," said Fleischman, "automating the entire process leaves less room for error and as a result, we've reduced our freight/routing chargebacks by 99%."

With the old system, Fairfield was forced to use multiple reporting systems to manually generate and distribute over 100 management, sales and costing reports. Besides its inefficiency, this process failed to supply company management with reliable information on customer profitability, product costing and trends in product performance.

With MaxQ's eProphet Business Intelligence module, Fairfield now has an automated costing, analysis and reporting system that enables the company to better understand and improve the performance of the business. "Looking at the reports for the first time was definitely a reality check," said Fleischman. "Our costing was way off on some of our products and it was much easier to see the difference with the new reporting system."

Working with facts instead of perceptions, the company can now quickly determine customer profitability and clearly focus the organization on ways to reduce the costs of doing business. "Without the eProphet reports, we'd still be doing things by hand," said Fleischman. "The ability of the salespeople to get their own timely reports, not only for their buyers but to also see snapshots of their own territories, has enabled us to save hundreds of man hours per year in report generation. In addition, our management team is able to perform analysis as needed."

Fleischman notes the system's flexibility as one of the best features of the system. "We have been able to handle just about any customer request," said Fleischman, "and you can't measure the cost of trying to retain an unhappy customer except in lost sales and market share, and we haven't seen either."

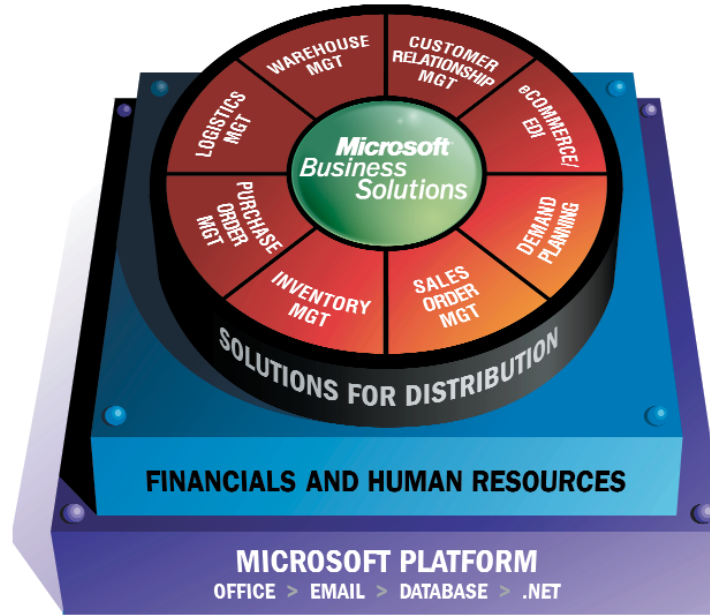
Success, by the numbers

The Microsoft/MaxQ solution gives Fairfield Processing a completely automated, end-to-end distribution management system that has greatly improved customer service by providing greater control over order processing and fulfillment, inventory management, and reporting and analysis. Among the most measurable results:

- > **Reduction in order processing time: 33+%**
- > **Reduction in freight/routing chargebacks: 99%**
- > **Reduction in overall chargebacks: 80%**
- > **Reduction in number of new processing personnel hires: 2**
- > **Reduction in time required for shipping processes: 100-200 hours per month**

"MaxQ's solution has greatly improved our customer service and brought us to the forefront of our competitors technologically" said Fleischman. "The knowledge, expertise and professionalism of MaxQ's staff were an essential piece of the puzzle and in the success of the project."

Microsoft Business Solutions for Distribution



Microsoft Business Solutions for the distribution industry connect easily with the Microsoft platform – a highly versatile environment that scales to meet nearly any business software protocol. From Windows®-based applications to specific industry programs, Microsoft integrates seamlessly with your existing and future enterprise systems, providing solid and reliable performance.

>> VI. About MaxQ Technologies, Inc.

For more than 15 years, MaxQ Technologies has been helping organizations use technology to solve real business problems and achieve strategic objectives. MaxQ provides complete, “out-of-the-box” standardized solutions that fully meet the unique needs of mid-tier organizations in specific markets, such as industrial distribution and consumer goods manufacturing and distribution. These solutions are based on Microsoft ERP platforms and are sold and fully integrated locally by certified Microsoft resellers.

MaxQ has significant experience in developing advanced supply chain management, business intelligence and financial applications and is the only Microsoft Business Solutions Inner Circle ISV (one of the top 11 ISVs) that develops on multiple platforms.

MaxQ is also a development partner of Microsoft, a certified member of Microsoft Business Solutions Independent Developers’ Program, a Microsoft Gold Certified Partner for software products and a member of the Microsoft Data Warehousing Alliance. MaxQ Technologies’ market-leading work with Microsoft has earned a broad array of industry accolades and awards. MaxQ also developed the eCommerce Gateway-EDI Edition, and Advanced Shipment Management modules, currently marketed under the Microsoft Business Solutions brand name.

MaxQ is headquartered in Norwalk, Connecticut with offices in Detroit, Michigan and Findlay, Ohio.

>> VII. Footnotes

- ¹ **Thinking Strategically About Supply Chain Management**, by Tim Houghton, VP Bellsouth Corp., Bill Markham, Principal A.T. Kearney Chicago, and Bob Tevelson, VP A.T. Kearney Atlanta.
- ² **Consumer Goods Technology**, www.consumergoods.com. December 2002 Newsletter, Griffin Stresses Global Standards at CGIT
- ³ **Perspectives on Supply Chain Management**, McKinsey & Company (citing The Performance Management Group), July 18, 2002
- ⁴ **Midmarket Opportunities For Supply Chain Management Vendors**, Forrester Research, November 15, 2002



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