

SAP Case Study



mySAP™ SUPPLY CHAIN MANAGEMENT AT PARBURY FHS

THE BEST-RUN BUSINESSES RUN SAP



AT A GLANCE: mySAP™ SUPPLY CHAIN MANAGEMENT AT PARBURY FHS

Strategic Goals:

- **Become the most comprehensive supplier of branded building products and solutions in selected markets**
- **Simplify order processes, improve customer service and delivery performance, and enable premium pricing**
- **Achieve operating flexibility to improve responsiveness to fashion cycles**
- **Obtain superior growth in market share and in return on net assets (RONA)**

Approach:

Parbury and FHS provided complementary products to the building industry. The companies united, were rebranded as Parbury FHS, and horizontally integrated their product lines. Parbury FHS analyzed its various customer segments, determined associated service-level requirements, categorized product demand, consolidated warehouses, and transitioned to processes that tailor supply to demand streams. The company also addressed its manufacturing constraints to improve production throughput. This approach was enabled by mySAP™ Supply Chain Management software, SAP® R/3®, and SAP® Business Information Warehouse.

Results achieved over the period January 2001 to September 2002:

- **Reduced stock-outs from 13.5% to 2.0% as inventory was lowered by 35% in volume and 25% in value**
- **Reduced order-to-ship cycle time by 40% for specific product lines**
- **Achieved on-time and in-full performance of 91%; achieved performance of 99% for some customers**
- **Achieved \$A 3.8 million annual cost savings, including reduction of freight costs from 4.2% to 3.6% of sales**
- **Improved RONA from 16% to 20%**
- **Increased sales by 5% in volume and 9% in dollar value**

REDUCING COMPLEXITY AND COST WHILE BECOMING THE MOST COMPREHENSIVE SUPPLIER

Parbury FHS supplies premium products used in the finishing of kitchens, bathrooms, and laundries and in the manufacturing of furniture. The company had fiscal year 2001 revenues of \$A 130 million (\$75 million), operates in the Australia and New Zealand markets, has 6,800 customers, and employs 450 people. In 2000, Parbury FHS became a member of Alesco Corp. Ltd., a publicly traded Australian company serving the building, construction, mining, and automotive industries.

Parbury was established in 1834 in Australia as a trading company. Through its original activities, which included importing, wholesaling, marketing, and distributing a variety of commodities and manufactured goods, the company contributed to the early commercial development of Australia. In recent years, the company has focused on serving as a supplier of high-quality products to the building industry. In 2000, Parbury acquired Furniture Hardware Supplies (FHS) to extend its range of building products, develop a more complete supply capability to the cabinetmaking industry, and position the company for long-term growth.

Parbury supplied bench tops, doors, and laminates for the top end of the cabinet and furniture markets, and FHS supplied complementary products, including high-quality handles, hinges, and systems. Both companies had a highly demanding customer base, served as solution providers for their customers, provided products with high-fashion components, and supplied a balance of manufactured and externally sourced products. The two companies were united and rebranded as Parbury FHS, yielding many benefits. Customers had more effective, one-stop access to a comprehensive range of products as well as simplified commercial relationships. Ultimately, this horizontal combination enabled customers to better integrate advice provided from various supply sources and thereby create better designs.

By enabling improved service to customers, the integration of Parbury and FHS enhanced the market positions of each of the formerly independent businesses. However, Parbury FHS realized that it would face challenges to ensuring its profitable growth in the long term. Despite increased demand resulting from a healthy home-renovation market, greater competition in its core markets and relatively high operating costs could inhibit the achievement of financial returns required by Alesco. Moreover, new customer service opportunities were surfacing, particularly through computer-aided design and electronic procurement solutions.

Parbury FHS determined that it must improve its supply chain planning and execution capabilities. The company developed a threefold strategy:

- Customize its supply chain processes and service-level requirements by customer segment
- Improve manufacturing utilization and throughput
- Position the company to take advantage of emerging e-business solutions

Though Parbury had operated SAP® R/3® to support its execution processes since 1998, Parbury FHS realized that it would need to couple its execution systems with a new class of supply chain planning software to address its requirements in the future.

After considering various software solutions and determining its postacquisition business strategy, Alesco selected mySAP™ Supply Chain Management (mySAP™ SCM) to be the foundation of the planning system for its integrated operations. A major factor in this selection was the proven success of SAP software at Parbury. Moreover, mySAP SCM addressed the specific supply chain requirements of Parbury FHS, enabling Alesco to build on an initial SAP supply chain implementation at Parbury FHS as it considered future application in other businesses.

“The results speak for themselves in the sense that the implementation has brought a real improvement to the way the business operates. Customer service levels are up, the inventory has been reduced, and significant costs have been stripped out of the business. Above all, sales have increased,” says Neil Freeland, CEO of Parbury FHS. Regarding the solution's fit with the overall Alesco strategy, Nick Brown, chief information officer at Alesco, says, “All our business units faced increasing competition on the one hand and customer demands on the other. The only way for us to stay competitive and to maintain our leadership in our niche markets is to have efficient production and business operations.”

IN DETAIL

Challenges and Objectives

In Australia in early 2000, robust residential-renovation activity, low interest rates, and consumer confidence in a strong new-home market underpinned moderately growing requirements for building products. The acquisition of FHS by Parbury was a response to this healthy demand as well as to wider choices in cabinetry products, laminate colors, and accessories from suppliers – and to increasing sophistication among customers.

Parbury FHS occupied a unique position in Australia and New Zealand as the only full-line supplier in its building-industry markets, but the company was facing growing challenges. Rivals were broadening their product lines, and they were achieving cost reductions and customer service improvements through business process reengineering and advanced e-business initiatives. While Parbury FHS was transitioning from a provider of products to a full-solution provider, others were undergoing similar transformations. In particular, key competitors such as Laminex had progressed in their information technology programs, had begun to offer computerized design services, and presented increasingly attractive options to building-product customers.

To compete effectively, Parbury FHS needed to improve its supply chain performance and cost; the business processes of the merged company were not performing at the levels necessary to grow profitably in the emerging competitive environment. The time frames required to commit to delivery of finished goods to customers were not competitive; customer order handling and service processes were complex; operations were not sufficiently flexible to enable rapid response to shifting demand; market share was not growing rapidly; and inventory-carrying costs and other expenses inhibited achievement of adequate financial returns. These challenges were compounded by the fact that 60% of Parbury FHS products were externally sourced; lead times were long for products such as laminate surfaces from Wilsonart in the United States and cabinet hardware from Blum in Austria. The infrastructure to support any improvements was also inadequate: Forecast accuracy was low, inventory data and related information were inaccurate, and the supply chain planning applications that had existed in Parbury FHS were not integrated with their execution systems.

Thus, key goals for Parbury FHS included enhancing its ability to respond to customer requirements, improving market share, and reducing costs throughout the operation. This meant reducing order-to-shipment cycle times, improving product availability, and enhancing on-time and in-full delivery performance. On the cost side, reducing inventory, warehouse rental, labor, and freight costs – and improving factory utilization – were paramount. In addition to improving financial performance, reducing inventory would provide operating flexibility to enable improved responsiveness to fashion cycles. Improving throughput would allow better utilization of assets, improve RONA, and enable deferral of capital expenditures.

Overall, lowering costs would contribute to market share growth by improving the price/performance of Parbury FHS products and services. As the Australian and New Zealand markets are fairly mature, the growth phase in building products could well be followed by a cyclical downturn, making efficient operations even more vital. Improving customer service would of course contribute to growth in sales and market share and in some situations would facilitate premium pricing.

Implementation

Shortly after the FHS acquisition in 2000, Parbury FHS initiated a detailed evaluation of its operations to determine how best to satisfy customer needs and reduce costs. The evaluation found that since Parbury and FHS had managed similar supply chains, efficiencies were likely to be gained by consolidating operations. The path to supply chain consolidation would be straightforward because both companies had a share of imported and Australian-made products and both targeted many of the same customer segments.

Nonetheless, the original supply chains had a number of deficiencies impeding Parbury FHS from obtaining supply chain outcomes associated with best-in-class operations. First, the companies did not differentiate among customer segments, service-level requirements, and product demand characteristics. Thus, uniform processes had been in place to serve all supply-and-demand streams, and better balancing of resources and service levels could not be achieved with existing policies. Second, the companies had no formal planning process to balance supply and demand. Third, the companies had not considered critical manufacturing constraints as they designed their network and planned production. Thus they had not taken advantage of opportunities to shorten lead times, reduce inventory, and improve throughput by unlocking production capacity at constraints. Fourth, there were redundant warehousing facilities and operations following the acquisition.

To address these deficiencies, the company implemented the following changes to its supply chain processes:

■ **Tailor Supply to Demand Streams**

Parbury FHS analyzed its various market and customer segments, determined the service requirements for these segments, and classified products according to volume and variability of demand. The company then used the Supply Chain Operations Reference (SCOR) model to determine how best to tailor supply-and-demand streams, as shown in Figure 1. The company established three primary channels covering high-volume order patterns, highly variable order patterns, and unpredictable order patterns resulting from project-by-project procurement by customers. This model allowed the company to establish channel-specific business policies and safety stock levels that varied according to product demand characteristics.

■ **Implement Sales Forecasting and Operations Planning**

Parbury FHS made relevant data visible to everyone with a stake in ensuring that supply and demand are effectively balanced, including product management, production management, and general management. The company established monthly sales-forecasting and operations-planning meetings where the supply-and-demand plans were formally reviewed; performance of locally produced and imported product was considered; exceptions and unique requirements were brought up for discussion; and market intelligence and longer-term constraints in material and production were factored into plans.

■ **Employ Theory of Constraints in Manufacturing**

Parbury FHS manufactures 40% of its finished goods. In order to shorten lead times, reduce inventory, and increase throughput, the company employed a “theory of constraints” model, establishing processes to identify critical material and capacity constraints – and to optimize these constraints in its manufacturing operations on an ongoing basis.

■ **Consolidation**

As operations of Parbury and FHS were unified, customer account numbers were merged; 7,000 SKUs were combined within the SAP order, financial, and related systems; and the number of warehouses in Australia and New Zealand was reduced from 16 to 12. These consolidations required considerable revamping of numbering schemes and physical-storage strategies. Warehouse consolidation was coupled with improved policies associated with material movement, virtually eliminating the need to transfer material between locations once received. Due to better tracking of material and a substantial reduction of the need to move material multiple times, costs for damaged and lost material declined from 1.60% to 0.78% of sales.

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Neil Freeland, CEO of Parbury FHS

To enable these changes, the company implemented SAP® Advanced Planner & Optimizer (SAP® APO) demand planning, supply network planning, and production planning and detailed scheduling (PP/DS) capabilities. The implementation also included SAP® Business Information Warehouse (SAP® BW) to monitor relevant transaction data, actual financial results versus plan, and key performance indicators.

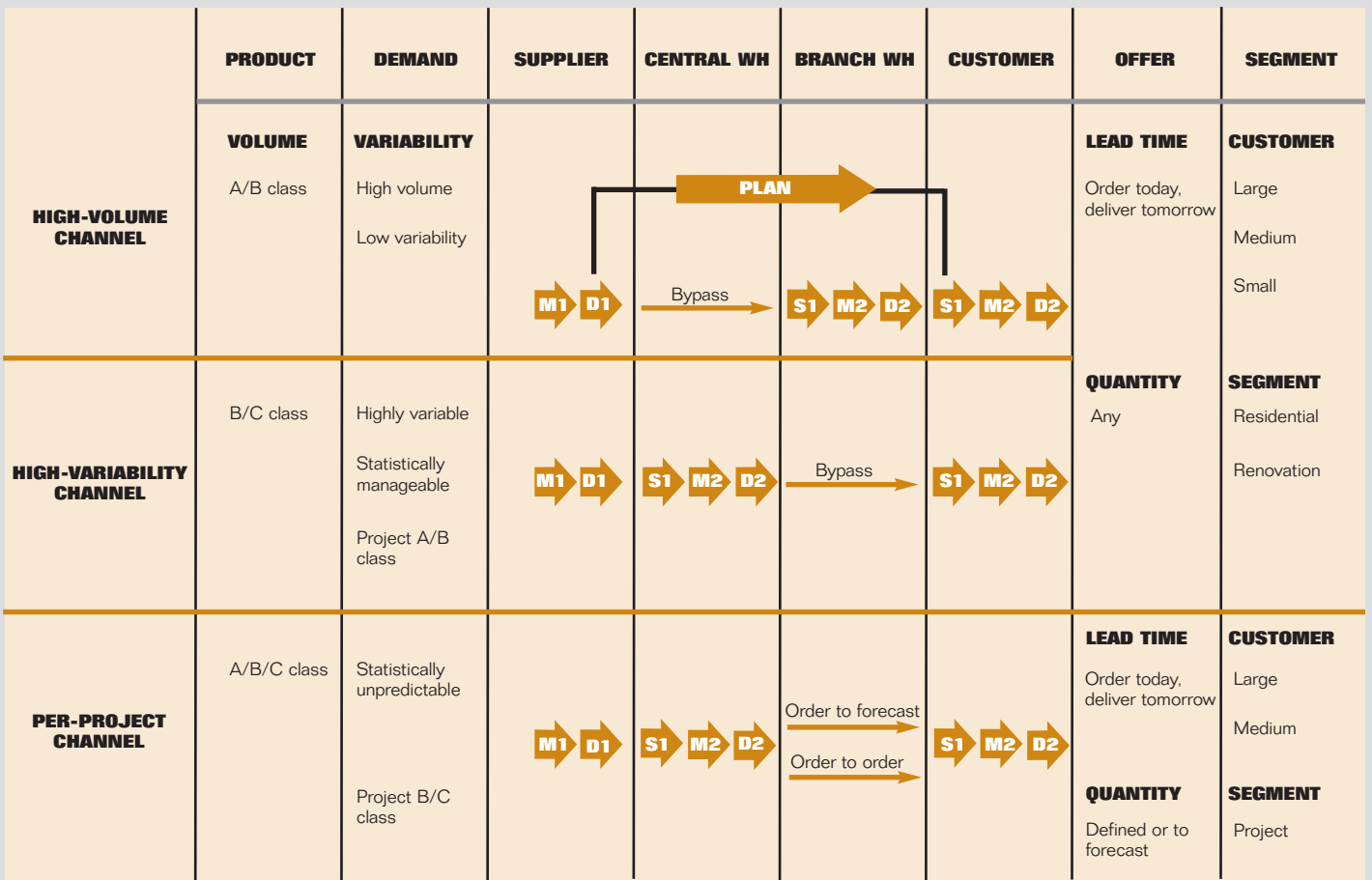
The company employed SMT and Plaut consulting firms, which have strong expertise in the supply chain arena, to assist with the implementation. Parbury FHS and the consultants established specific milestones and followed strict project reporting and review processes covering the implementation to support achievement of supply chain performance goals. SMT also guided Parbury FHS on critical issues covering the evolution of the cultures of the merged organizations. The project was completed in 12 months and when fully implemented, supported 25 users of SAP APO and SAP BW in addition to the 150 staff already using SAP R/3.

A key aspect of the implementation was the use of SAP variant configuration. The company established production process models (PPMs) in SAP R/3, which contained bills of material (BOMs) and routings and stored characteristics-dependent production plan references for similar products. When a sales order is entered, the variant configuration capability is used to select specific materials according to the characteristics identified in the order and the specifications in the BOM of the appropriate production process model. The resultant planned orders are passed to SAP APO PP/DS, where constraints in material and routings are identified and optimized frequently during each working day.

Through these actions, results are now being achieved that support strategically significant and measurable improvements to inventory, cost, customer service, and more. Forecast accuracy has improved significantly as the company has gained experience with sales forecasting and operations planning and refined its use of SAP APO demand planning. Moreover, forecasting and procurement planning are enhanced by considering material characteristics specified in the BOM configurations of historical orders. The new processes also give visibility into material requirements for scheduled orders and further facilitate

procurement planning. Parbury FHS had been placing large, irregular orders monthly or bimonthly with its suppliers but is now placing regular weekly orders, improving its suppliers' abilities to plan and thereby improving Parbury FHS's negotiating position. Parbury FHS's design and construction partners are also able to plan better due to the company's improved forecasts and in turn are able to improve service levels to their customers. Resolution of manufacturing constraints has improved production throughput by 20%. Daily cycle counting has enabled inventory accuracy to advance from 92% to more than 98%, which has facilitated a reduction of the levels of raw materials and finished goods. Finally, many employees are undertaking what-if analyses with the range of available data, further improving planning and execution across the supply chain.

Parbury FHS has chosen to integrate related product lines, establish supply chain channels to match supply-and-demand streams, and resolve constraints in its manufacturing network. The company recognizes that its process designs are not static and that its business and enabling systems will continue to evolve in line with market demands. In the future, Parbury FHS will advance its business processes by making use of mySAP™ Customer Relationship Management (mySAP™ CRM) capabilities to improve its interaction with the market and deepen understanding of customer requirements and issues. The company will also provide interactive design systems to kitchen designers, cabinetmakers, and end consumers, enhancing loyalty to Parbury FHS and its brands, and eventually facilitating online configuration and order processes. The company's SAP implementation has become a model for other Alesco businesses pursuing similar goals, and ongoing achievements in cost reductions and customer service improvements will enable Parbury FHS to make continual improvements in market position, premium pricing opportunities, and financial return.



SCOR MODEL PROCESS CATEGORIES

M1: Make-to-stock D1: Deliver stocked product S1: Source stocked product
M2: Make-to-order D2: Deliver make-to-order product

Figure 1: Using the SCOR Model to Tailor Supply and Demand Streams

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