



Strategic Solutions NW

Delivered Pricing in the Forest Products Industry

Managing freight cost effectively and efficiently

Incorporate freight into sales price, timely accrue and pay, analyze cost and profitability.

Many of the forest products companies face complex, industry-specific business challenges that aren't easily accommodated by even the best ERP systems, and the Forest Products Industry's use of delivered pricing is a perfect example of that complexity. As a direct result of our extensive experience with both the Forest Product Industry and Microsoft's Dynamics AX ERP software, we at Strategic Solutions NW have developed a vertical to better marry the needs of the industry with the core functionality of the software. One of the key features of our vertical revolves around the topic of Delivered Pricing.

Delivered pricing, which is a staple in the timber industry, is the practice of incorporating freight costs into an item's final sale price. Because the cost of freight for a heavy commodity is a significant cost factor, buyers often insist on a firm final price that includes any and all freight costs. The ability to accurately distribute freight cost is absolutely critical not only to making a sale, but also to tracking costs, variances, and margin. Although Microsoft's Dynamics AX currently has the ability to manage basic freight allocation, the system simply isn't designed to handle the complexity of delivered pricing.

For example, freight charges in AX can quickly and accurately be applied to an order, expected freight costs can be accrued, and freight bills matched to orders by leveraging the new Transportation Management functionality. However, AX is only capable of applying freight charges to an order at the time of shipment, which is far too late in the process for a forest products salesperson assembling a quote. In order to distribute freight at the time of quote, AX must be modified.



Where to Begin?

AX currently allows for a seamless transition between the sales order/quote and the Load Planning Workbench in order for a salesperson to rate shop, but rate shopping at this point in the order creation process is primarily used for “what-if” scenarios and pulling back a Delivery Mode to the quote. Rates aren’t actually applied to the order because rates are attached to routes, and, at the time of quote, no route record has been created. This is where the system modifications begin.

In order to begin applying a rate to a quote, the customer rate derived from the rate query must be applied to the order when the Mode is updated.

Retrieving the rate is easy enough, but the freight costs must still be split across all sales lines – a split that is ultimately distributed by item weight. This is where the specifics get complicated. For example, if a salesperson is building a quote, the quote may not require a

full truck. However, the customer will often have the expectation that the item cost reflects freight required for a full truck. Determining how the system should split freight at this stage of the ordering process is critical to success.

To further complicate the matter, the agreed upon sales total at the time of order confirmation is based on the price-plus-freight charges – not just the item price. If for some reason the freight costs change before the order ships, the final customer total cannot be manipulated. Thus, if the freight costs change, we are forced to update the unit price – which directly impacts margin – in order to maintain the agreed upon delivered price. This point is critical because it prevents the use of AX’s trade agreement system – at least without further modifications – because trade agreements do not support Ship To, Mode, and Delivery Term specific pricing.



IF THE FRIEGHT COST CHANGES AFTER IT'S QUOTED, THE FINAL CUSTOMER TOTAL CANNOT BE MANIPULATED THUS IMPACTING MARGIN.

Complications

Once a rate has been distributed across sales lines, managing changes to the order after freight has been assigned creates another complex challenge. If the customer calls prior to production and decides they want more of one product and less of another, can the system handle updating the freight charges, or is the user forced to intervene?

The next issue to tackle is ensuring that the charges are correct when a shipment is confirmed. If a loaded vehicle is overweight, a unit must be unloaded and the shipment is delivered short – a problem the seller must manage. This means the charge may have to be adjusted after the vehicle weighs out. This situation presents problems in AX even without the complications regarding freight.

Once an order has been shipped with accurate freight charges, invoicing should be a piece of cake – except when calculating discounts, which are typically not applied to freight charges. Accurately applying calculated discounts is one of the more difficult modifications required in the process because it involves adjusting the calculation of cash discounts – which is buried in the Sales Totals class, and thus impacts many areas of the system.

Finally, once all the transactions are verified as accurate, the associated documentation must be updated as well. Instead of a standard confirmation or invoice that displays a unit price, the documentation should reflect a sales price that combines the unit price and the freight charge. As a consequence, the freight charge should not be displayed in the typical out-of-the-box locations in order to avoid the appearance of double-counting.

Adding It All Up

Modifying AX to accurately distribute delivered pricing may sound complicated, but that’s because it is



IF DELIVERED PRICING IS CRITICAL FOR YOUR BUSINESS, BE SURE TO CONSIDER THE LONG-TERM COST OF YOUR SOLUTION WHETHER PERFORMING THE MODIFICATIONS INTERNALLY OR PURCHASING A PACKAGED SOLUTION.

complicated. However, at Strategic Solutions NW we strive to implement solutions with minimal code footprint because we fully understand the impact that system modifications can have on updates and system up-grades. Although Microsoft is constantly working to expand the reach and functionality of AX –

particularly in the areas of transportation management – the complexity and industry-specific nature of delivered pricing is unlikely to be accommodated out-of-the-box anytime in the near future. If delivered pricing is critical for your business, be sure to consider the long-term cost of your solution whether performing the modifications internally or purchasing a packaged solution.