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INVESTIGATING THE COST BENEFITS OF RETURNABLE PACKAGING

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Tough Economic Times

Returnable and reusable packaging systems offer many benefits to their users. Product protection, ergonomics, potential automated interface, durability, and the reduction of solid waste are some of the benefits that immediately come to mind.

Yet in these challenging economic times, more and more companies are being forced to look at the bottom line first, and at the other direct and indirect benefits second. This may be unfortunate, but it is a reality.

However, maintaining a healthy bottom line and realizing the benefits gained by developing and implementing a returnable packaging system need not be mutually exclusive. Many companies that have invested in returnable packaging programs are finding gains in both application benefits as well as cost benefits. But old perceptions and myths tend to linger. Through this document, we'll take a look at some of the myths surrounding returnable packaging programs, what the truths are, and ways in which you can accurately determine whether such a programs is right for your environment.

Myth: "We can't afford it."

How can an individual or company determine whether they can afford reusable packaging, or not, without first doing the homework?

Consider this; a subordinate has come to your office with a great new idea and a proposal from a potential reusable packaging supplier. You look at the bottom line, and immediately think that the cost for getting into a returnable packaging program for the product in question is just too expensive. But how do you really know?

What Are You Spending Today?

Requisitions and purchase orders cross your desk on a daily basis. You sign them, and move on to your next task. Your first step in performing a cost benefit analysis for a new returnable packaging application is to consider these requisitions and purchase orders. Wooden pallets, cardboard boxes, packing materials, shrink wrap, packing tape, banding, and self adhesive labels, are just a few of the typical items associated with the expendable packaging stream. These are direct costs. You buy these products month after month, and year after year, for as long as your product is in production. You buy these products, use them once, and they are gone. But are they?

On the Receiving End

Meanwhile, your customer is receiving the products they ordered, and some things they didn't. All this expendable packaging has to go somewhere, and it does, to your customer. And depending on where your customer is located, disposal and landfill costs can add up to a significant dollar amount on an annual basis. In areas where this is a critical issue, it can make the difference between you or your competitor getting that important new program

In addition, your customer probably has a labor force that spends time unpacking parts, consolidating and segregating waste, and transporting it out of their plant. These are direct downstream costs that affect your customers ability to compete, and with it, your ability to grow your business

Back at Your Plant

You looked at your requisitions, and now understand your current direct costs for expendable packaging. The next step is to identify the more subtle indirect, or soft costs, associated with expendable packaging. Labor to package your products, labor to handle and transport expendable packaging within your plant, floor space allocated to store the material, and even the level of fire protection insurance you may be required to carry all contribute to the indirect, or soft costs associated with expendable packaging.

Let's Talk Quality

Every week your company works hard to produce quality products and ship them on time. But what your customer receives may be a different story. Is every part that your company ships arriving intact and undamaged? What are your company's annual warranty costs? How much of this cost is associated with product damaged during handling and shipment? Could product quality be improved through the use of a reusable packaging system? Product damage during shipping, and the associated warranty costs are not just lost opportunity, they are additional costs that eat into both your profits and reputation as a quality supplier.

Float

If you are seriously considering a reusable packaging application, you need to consider the float, or size, of the packaging fleet that will be required to support your production and delivery volumes. If you are shipping by truck, how long does it take for a load of product to travel from your facility to your customers? How long does it take to travel back again? And what inventory levels (including work-in-process) need to be maintained at both your plant, and at your customers?

Typically, the further the shipping distance, the larger the required fleet size. In addition, do not forget to multiply this by the number of customer locations to which you ship product.

Unrealized Opportunity

Ergonomic advantages, automated interface opportunities, integrated in-process and outbound material handling processes, and the ability to increase line speed and affect productivity are potential increases in efficiency that your company may realize if it moves into a returnable packaging system. All these factors may have to be considered when evaluating the indirect costs associated with the potential lost opportunity of using expendable packaging. These factors should be evaluated with both your facilities and your downstream customers operations in mind.

Checking it Once, Checking it Twice

Now that you have started to really consider all the direct and indirect costs associated with both your current expendable packaging use and the proposed reusable packaging system, you need to line the costs for each up against each other. A checklist needs be developed, to ensure that all the costs for both methods of packaging are captured. Typically, the costs for expendable packaging are compiled, and then multiplied out over your product's anticipated program life, while the costs for reusable packaging are captured as a one-time, up-front investment.

Returnable Packaging Isn't Forever

Returnable packaging isn't for everyone, and it isn't forever. Consider your product's anticipated life cycle. Most returnable packaging systems should last an average of approximately five years, based on the feedback received from end-users. For these five years, some level of returnable packaging attrition needs to be taken into account. A typical manufacturing organization budgets somewhere between two and five percent per year of the total reusable packaging fleet's value for additional purchases to replace or repair damaged, lost, unreturned, or stolen packaging. For products that are intended to stay in production longer than five years, you should probably budget additional dollars to support your fleet.

Measuring Value Within Your Organization

Once you have identified all the direct and indirect costs associated with your current expendable packaging and the proposed returnable packaging, contact your financial staff, and discuss with them how to factor these costs. While a few companies may actually compare straight cost-to-cost in today's dollars, most companies will probably use a more sophisticated financial model to factor these costs. Your financial staff can assist you in creating a costing model that will allow you to compare these projects via the payback, internal rate of return, or net present value methodology.

In addition, most companies will usually have an established length of time within which a project must be justified. While a shorter time frame is always more desirable, most companies have realistic expectations, and will probably be looking for a project payback period of three to five years.

On the Balance Sheet

In addition to giving you direction with regard to your organization's preferred methods of analyzing projects and supplying you with a time frame within which a typical project must realize a payback, your financial staff will also be looking at where these comparative costs fall on the company's balance sheet.

Expendable packaging is bought on a regular, ongoing basis, and is typically expensed as a manufacturing supply. In comparison, the up-front costs associated with a reusable packaging system are usually considered a capital investment, and are subject to depreciation. If the project isn't capitalized, it will probably be viewed as an operating expense, and depending on your supplier's proposal, it may even be available as a lease, avoiding the up-front investment.

Conclusion

Through this document, we've taken apart some of the lingering perceptions and myths regarding returnable packaging systems, and ways in which you can determine if this is the right approach for your environment. The implementation of a reusable packaging system requires planning and evaluation. While not every current use of expendable packaging is subject to being displaced by a returnable packaging system, more and more products are finding themselves shipped in a returnable and reusable container.

While ergonomic, product protection, and process integration benefits all play a role in the decision process, the overall cost benefits of returnable packaging are what continue to be the driving influences in replacing expendable packaging with returnable packaging products. Consider your products and perform an evaluation; you may be pleasantly surprised with what you discover.

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