

# THE PACKER

## Calculating the cost-benefit of the traceability initiative

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By Elliott Grant, guest columnist



In his recent column, "[Cost-benefit analysis: Is it too much information?](#)" (May 25), *The Packer's* National Editor Tom Karst asked: "What's the cost-benefit of the Produce Traceability Initiative (PTI)?"

This apparently simple question had not been tackled directly. As a result, many produce companies are sitting on the fence, unable to justify an investment with an unclear payback.

One answer is that "it's a cost of doing business because the government or retailers will require it," and by implication doesn't need to be analyzed.

This may be so, but for many grower-shippers that's unsatisfactory. Produce industry executives need a business case for PTI. After all, if a compelling business case is made, then compliance will be in a company's interest.

The promise of PTI is whole-chain traceability, resulting in faster, narrower recalls and a reduction in the "collateral damage" caused to innocent growers and shippers from others' recalls.

We at Yottamark can build a model to analyze the value of this promise. We want to model both a recall that implicates a shipper, and the one in which the shipper is not implicated, but is still affected.

First, we must make our best guess at the probability of each recall happening sometime in the future. Then we calculate the negative economic impact of the resulting drop in sales, followed by a period of recovery.

We can then make an assumption about the reduction in the depth and duration of these recalls if PTI is implemented. (Note: We do not assume that PTI reduces likelihood).

That gives us the value created by PTI. Subtract from this the ongoing cost (labels, software, hardware, labor, etc.) and restate it in today's dollars, and we have the net present value of PTI.

Now, many of these inputs are unknowable, such as the likelihood and timing of a recall. However, one can make reasonable assumptions based on experience.

The key number to look at is how effective PTI needs to be on softening a recall and accelerating its recovery for it to be at least a break-even investment given a set of reasonable starting assumptions.

If this break-even number seems reasonable, then we can conclude that, above this number, PTI creates value.

OK, so what happens when we run some numbers? Well, there is no single, simple answer.

But, with some reasonable set of starting conditions for produce such as tomatoes, cantaloupe and leafy greens – where there have been recalls in the past – enhanced traceability needs only to reduce the impact of a recall happening in the next 10 years by a believable amount and it's going to pay back. In other words, we don't need to assume miraculous results for traceability for it to be a smart investment.

What's interesting is the model demonstrates how important rapid communication and identification of affected products and unaffected products is.

Case-level traceability – and item-level traceability that reaches all the way to the consumer – can soften the impact of a recall and speed return to business as usual.

Our analysis is conservative in several important aspects. It assumes that retailers show no preference for traceable produce, nor pay any premium for traceable produce.

It also does not reflect the sales lift that could result from increased consumer confidence in a brand. It doesn't attempt to determine the value of improved visibility into the supply chain or ability to quickly get and respond to feedback.

Calculating the value of traceability is imprecise, but it's not impossible. When shippers have the tools to determine the value of better traceability for themselves, we think that when they put in their own numbers many will agree the benefits outweigh the costs.

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