

# Joseph Ellin's Commentary on "Cost of Design Improvement"

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Cost of Design Improvement

## I

Philip Harding figures out how to improve a part right in the middle of production on an order. He's convinced that the customer, GFI, would prefer the perfected part. Should he delay further production while he verifies his new idea, or go ahead and finish the order as is? What Philip should do is talk to GFI and find out what they prefer. Maybe he's right and they want the perfected part, despite the extra cost and small delay in completing the order. But it's their choice, not his.

## II

Evidently Philip agrees with this and wants to talk to GFI, but first he presents the new design to other people at WPI, which is reasonable for him to do. All he wants to do is offer the design to GFI. However there is a cost problem to be worked out, as the financial and sales people quickly tell him. But it's not clear from the case why WPI should pay any part of the cost of the new component, since presumably development costs go into the final product price. There seems to be an assumption that WPI is locked into the \$100/unit price, but that was the price for the unperfected part, to which GFI agreed. So the perfected design can be offered to GFI at the \$3 increase in price, which seems fair since it only covers WPI's costs. Again, the cost question would seem to be one of the points to be negotiated with GFI; if they aren't willing to pay a fair price for the new part, they are free to use the ones they originally contracted for.

But Philip now has another point, which is that WPI is at fault in not designing the part properly in the first place. His argument seems legalistic; what was offered was

the best design WPI could think of at the time of the contract, not the best design WPI might ever think of, stretching out to all eternity. Connie's financial reservations ought to carry the day, though her unwillingness to offer the new design immediately doesn't seem justified. Sales manager Tim's point is well-taken, that GFI will be displeased to learn later that a better design was available.

So I select option 3: tell GFI and offer the new part at GFI's expense. However suppose GFI doesn't go for this, and wants the new design at the old price. WPI can then well fall back on option 1, sharing expenses. If GFI won't accept this compromise, then WPI should stand by its original contract. GFI gets the old part at the set price.

## III

If there is more money at stake, the case for (3), with (1) as fall back, is made even stronger. Actually the case for not supplying the improvement free to GFI is weak due to the small cost involved. Because of the small cost, WPI's third fall back position should be (2), to tell GFI and offer to pay, but only after discussion. If GFI insists on getting the improvement without paying, WPI can probably agree as a good will investment.