Ted Lockhart's Commentary on "Cost of Design Improvement"

Commentary On
Cost of Design Improvement

I

The advantages of Philip's investigating the idea immediately are that, if the idea works out, then WPI may be able to offer GFI an improved product that GFI may wish to have instead of the component that they are now receiving. This would benefit both GFI, since they would be able to produce better harvesting equipment, and WPI, since their reputation as a producer of high quality components will be enhanced. The disadvantages appear to be that, before Philip's idea is checked out, there is no assurance that it would result in an improved component and thus Philip's efforts may be in vain and that, by taking time away from his current job of filling GFI's order, he might risk delaying GFI's order and thus antagonizing an important customer. One option that he might pursue is to inform his colleagues at WPI of his idea and suggest that they contact GFI to see whether they would be interested in receiving an improved component in place of the version they are currently receiving should Philip's idea work out. GFI might also be informed that an improved component would cost more to produce and consequently would require that a higher price be set and also that Philip's working on the improvement might delay the order they are currently receiving. WPI could then use GFI's reply to decide whether Philip should go ahead with his investigation. This seems to be an alternative that would both minimize WPI's uncertainties about the value of Philip's idea and hold open the possibility of WPI's pleasing an important customer and enhancing its reputation in the industry.

Although Philip believes that, if GFI had known about the improvement earlier they would have wanted it, there is no agreement or promise that would be violated by WPI's not attempting to improve the product, since Philip's idea occurred only after

the first shipment had gone out. However, because of the possible benefits of improving the product, there is good reason for Philip and WPI to pursue the option described above.

II

It is difficult to know what to make of Philip's suggestion now that the "flaw" in the original design was "an oversight on WPI's part". Perhaps having now discovered a fix for the component, he wishes that he had discovered it sooner and wonders why he did not think of it in the first place. However, this is probably true of many, if not most, designs. If so, it is not clear why Philip should now regard the original design as being the product of an "oversight". This, however, does not mean that GFI should not be informed of the improvement. It can be argued that simply because of the benefits to GFI and possibly to WPI as well as to those who will purchase GFI's equipment and enjoy the advantages of the WPI's improved component--performance, reliability, durability, etc.--WPI should offer the improved product to GFI. This is true even if WPI has no legal or contractual obligations to do so. This course of action would prevent any later perception on GFI's part that WPI had "held out on them."

If WPI informs GFI of the improved component and GFI is interested in substituting the improved component for the unimproved one, then there will be some sort of negotiation of the terms under which that substitution would be made. Without additional information it is difficult to say what WPI's position should be in such negotiations. WPI must consider such things as whether absorbing the increased costs of the improved component would diminish its profitability too greatly, whether refusing to absorb any of those costs would result in GFI's being unwilling to purchase the improved component and antagonizing GFI to the point of ruling out WPI as a supplier in the future, whether WPI's sacrificing profitability in the short run by absorbing all or some of the increased costs would be outweighed by the long-term economic benefits of supplying the improved component to GFI, and so on. One may speculate that $2250 is not a huge amount of money and that, if GFI resisted paying a higher price for the improved component, WPI should be willing to absorb the increased costs if doing so secured GFI's future consideration of WPI as a supplier of other products. Connie's preoccupation with short-term profits appear shortsighted. However, to make a firm judgment about this would require more

information about WPI's profit margin on this and other components that it is producing and projections into the future of the market for the products that WPI produces.

III

Surely economic considerations are relevant in choosing the selling price for a company's products. Therefore, if the improved component had cost much more to produce, that would and should affect WPI's selling price, its profit margin on the component, and the effects on its profits of absorbing all or part of the increased costs of producing the improved component.

However, the kinds of considerations that WPI should consider in negotiating the selling price of the improved component with GFI are the same as in Scenario II -- i.e. short-term profitability, long-term effects on profits and reputation, etc. WPI should conduct its business not only to make profits and improve its market share but also to provide products that serve the needs of society. It is difficult to tell whether the latter is true without knowing what WPI's component is and what it is used for. Of course, if WPI's products serve no purposes other than to make a profit for WPI, then WPI should not be in business at all and questions about its dealings with GFI are moot. Beyond this very fundamental ethical consideration, WPI may conduct its business with GFI, or any other customer, in any manner that is fair, honest, and reasonably profitable.