# Birch paper company case study solutions 

Business, Company

## ASSIGN BUSTER

1. Calculating all three options based on costs Thompson Division Costs Linerboard and corrugating medium 168(70\%*400)*60\% 30\% of out of pocket costs 120(30\%*400) Total 288 West Papers Costs Total 430 Eire Papers Costs Outside linear(Southern div) 54(60\%*90) Printing(Thompson div) 25 Own Supplies 312(432-5-36) Total 391 As shown in the calculations above, Northern should accept the bid from Thompson division as it has the lowest cost if all transfer prices within the company were calculated at costs. Incurring the lowest costs would also enable Birch Paper Company to earn the highest profits possible.
2. As alternatives for sourcing exists, Mr. Kenton should be permitted to choose the alternative that is in Northern division's own interests. The transfer price policy gives him the right to deal with either insiders or outsiders at his discretion. If he is unable to get a satisfactory price from the inside source which is Thompson division, he is free to buy from outside. Mr. Kenton, manager of the Northern division should not accept the bid from Thompson division. The three bids from Thompson division, West Paper Company and Eire Paper Company are \$480, \$430 and \$432 respectively. Accepting the bid from Thompson division would be accepting the highest bid amongst all three offers (highest costs). This would result in the lowest profits. As the Northern division is evaluated as an investment center, it is judged independently on the basis of its profit and return on investment. Mr. Kenton should not accept the bid from Thompson division.
3. The method of using transfer price to decide whether to insource is optimum if the selling profit center can sell all of its products to either insiders or outsiders and if buying center can obtain all of its requirements
from either outside or insiders. The market price then represents the opportunity costs to the seller of selling the product inside. In this case, Thompson division had been running over capacity and Southern division also had excess inventory. The transfer price of $\$ 480$ offered by Thompson division does not represent the opportunity costs of selling inside as there is no demand market for the product outside.

Also, the transfer price of $\$ 480$ is higher than the market price which is around $\$ 430$. Deciding based on transfer price will not induce goal congruence as the situation is not ideal. Without any intervention from the vice president of Birch Paper Company, the Northern division would most probably accept the lowest bid from West Paper Company. This might result in the highest profits for Northern division but it is not in the best interests of Birch Paper Company. Accepting the bid from Thompson division would boost demand for the two other divisions. The losses cut would most probably be more than the costs saved by Northern division which is $\$ 50$ (\$480-\$430).

The vice president should give specific orders to Northern division to accept the bid from Thompson division. However, as the transaction in this case represents less than $5 \%$ of the volume of any of the divisions involved, it might not be possible for the vice president to intervene other transactions when similar problems arise.

The policy can be put regarding the transfer pricing which would be based on the opportunity cost of the divisions. If the divisions is operating at full capacity then the opportunity cost would be the market price that the
division is charging for its products and if the division is operating at less than the full capacity and order fulfilment can be achieved at less than the capacity than the opportunity cost should be the variable cost of producing the extra units. This would help is reducing the cascading effect of overpricing the inputs to each other and rather would be based on the opportunity cost involved. it is apparent that each division is trying to maximize its own profit by posting a high mark-up for its output; with Thompson Division posting $20 \%$ on top of its out-of pocket cost and Southern's 40\%.

With this set up, it is also obvious that without top management's intervention, Northern will buy boxes from West Paper because the latter had the lowest bid price. If this will happen, the Company's ultimate goal of maximizing its profits will not be attained. The operations of the two other divisions (Thompson and Southern) will not be maximized when there is already an opportunity. There will be high opportunity loss for the other two divisions. The company as a whole will have to shoulder for the cost of design and development work incurred by Thompson's package design and development staff.

However, if Northern gets boxes from Thompson, operating capacity of Thompson will be maximized and excess inventory of Southern will be utilized. Only that, a transfer price should be set. Thompson will still realize profit even if it lowers down its price at West Paper's offer of $\$ 430$. Southern Division as well could lower down the price of its linerboard for Thompson. With the company's adoption of a transfer pricing system, all these concerns
will be addressed. Thompson division need not charge the full $20 \%$ of its overhead cost if it is not operating at its full capacity, thus passing on the burden to the other division.
4. Ideally, when there is an availability of market price, the division should
use it. However, Thompson used a cost-based transfer price instead.

Cost-based transfer price should only be used when the market price is not available. The problem with Birch's transfer pricing system is that they allow each division to set their own price freely which is in line with the company's policy to decentralizeresponsibilityand authority. When each division can set their own price, conflicts and disagreements can occur on a frequent basis and each division could make decisions that only benefit their own division rather than the company as a whole. Firstly, we look at the transfer price that Thompson quoted. It is about $\$ 50$ more than the market price.

This shows that their price is not competitive enough. Thompson is operating below capacity and yet it quoted a price which is higher than the market price. The reason given was that anything less than $\$ 480$, they will not be able to earn a profit and also, given that they did not get any profit from developing the product for Northern, Brunner feels that they are entitled to a good markup. This is inconsistent with the expectation that the division must meet the market price if they wanted the business. Market price should be used as it reflects how well is the division doing as compared to competitors. The amount of upstream fixed costs and profits that are included in the final price that was sold to the outside customer could be substantial if Thompson's bid was accepted.

And Northern might not be willing to reduce its own profit to optimizecompany profit. Hence, Thompson, if unwilling to follow the market price blindly, could use the two-step pricing to calculate their transfer price. That is, transferring the goods to Northern on standard variable cost on a per unit basis and fixed cost and profit on a lump sum basis. In this way, Thompson will not be transferring majority of their fixed cost to Northern because they are operating on excess capacity. But of course, this method must be discussed with Northern. It was mentioned that Southern quoted the market price to Thompson even though they are operating on excess capacity.
This will not pose a problem as the market price reflects the demand and supply situation of the market and is adjusted automatically by the demand and supply. Also, account must be taken into of the fact that Thompson will not be able to get a better price from other outside sources as most will follow the market price too. The underlying problem of the transfer price system could be that each division is judged based on profits and return on investment. This causes the division to over-emphasize on profits and encourages goal incongruence.

Each division aims at achieving short-term profits so as to look better in the company's eyes. In their bid to achieve a high profit figure, they fail to optimize the company's profit as a whole. This will affect the company longterm profits. Hence, the company should not just assess each division based solely on financial figures like profit and return on investment. The company should assess them based on other non-financial things like quality so as to divert the division's emphasis on profits. In addition, the company should allow the divisions concerned to negotiate between themselves as they are the ones closest to the situation, rather than just asking the divisions to meet the market price.

