# Case study - birch paper company 

Company Background Birch Paper Company was a medium-sized, partly integrated paper company. It had four producing divisions, namely Northern Division, Thompson Division, Southern Division \& one unnamed Division and a Timberland Division.

Birch Paper was producing white and kraft papers and paperboard. A portion of its paperboard output was converted into corrugated boxes by the Thompson Division, which was also printed and colored the outside surface of the boxes. Company policies The management implemented a policy of decentralizing responsibility and authority for all divisions except those relating to overall company policy. Each division was judged independently on the basis of its profit and return on investment.

Present situation Thompson division had provided services including package design and development on a special display box to Northern Division. Under the agreement, Thompson Division was reimbursed by the Northern Division for the cost of its design and development work, Thompson Division did not receive any profit on this project. Once all the specifications are ready, the Northern Division asked for bids on the box from the Thompson Division and from two outside companies. Northern Division received the 3 bids as follows: Bid No 1 - West Paper Company The Northern Division received bid on the boxes of $\$ 430$ a thousand from West Paper Company. Bid No 2 Thompson Division The bid offered from Thompson Division was S\$480 a thousand of boxes.

If Thompson Division got the order, it would buy its linerboard and corrugating medium from the Southern Division of Birch. About 70\% of

Thompson's out of pocket cost of S\$400 for the order represented the cost of linerboard and corrugating medium. Although Southern Division was running below capacity and had excess inventory, it quoted the market price, and it's out of pocket cost on both liner and corrugating medium were about $60 \%$ of the selling price. Mr.

Brunner, the manager of Thompson Division felt that he should be entitled to a good mark up on the production as Thompson had done the design and development work for Northern Division without any profit, he add the full 20\% overhead and profit charge to his out-of-pocket costs. Bid No 3 - Eire Papers Company The Northern Division received bid on the boxes of $\$ 432$ a thousand from Eire Papers Company. If Eire Papers Company got the order, it would offer to buy from Birch the outside linerboard with the special printing already on it. The outsider liner would be supplied by the Southern Division at a price equivalent of $\$ 90$ a thousand boxes, and it would be printed for $\$ 30$ a thousand by the Thompson Division.

Of the $\$ 30$, about $\$ 25$ would be out-of-pocket costs. QUESTIONS 1. Which bid should Northern Division accept that is in the best interests of Birch Paper Company? 2. Should Mr. Kenton, the manager of Northern Division accept this bid? Why or why not? 3.

Should the vice president of Birch Paper Company take any action? 4. In the controversy described, how, if at all, is the transfer price system dysfunctional? Does this problem call for some change, or changes, in the transfer pricing policy of the overall firm? If so, what specific changes do you suggest? Q1) Which bid should Northern Division accept that is the best
interest of Birch Paper Company? If we only based on the bidding price from the 3 companies, the cost to Northern Division if it accepts the bid from Thompson, Eire Papers and West Papers are $\$ 480$, S\$432 and $\$ 430$ respectively. On the first glance, Northern Division should accept the bid from West Papers as it is the lowest bid to Birch Paper Company. Q2) Should Mr.

Kenton accept this bid? Why or why not? Our group thinks that Mr Kenton should make a thorough study on cost effectiveness of all transactions for every bid that he receives. To facilitate him for a cost effectiveness selection, our group presents the following cost analysis: Analysis 1: Bid from Eire Papers of $\$ 432$ Vs West Papers of $\$ 430$ If Mr. Kenton accepts the bid from West Papers, the total cost is $\$ 430$ which is the lowest bid. However, if Kenton accepts the bid from Eire Papers, Eire Papers will offer to buy from Birch the outside linerboard with the special printing already on it. The outside liner would be supplied by the Southern Division at a price equivalent of $\$ 90$ a thousand boxes, and it would be printed for $\$ 30$ a thousand by the Thompson Division.

As a result, Birch Papers Company will generate a profit of $\$ 41$ dollars a thousand of boxes from these transactions, i. e. Profit gained by Southern Division of $\$ 36$ and Thompson of $\$ 5$. After contra the profit of $\$ 41$ with the bid price of $\$ 432$ that offer by Eire Papers, the net cost to Birch Papers Company is $\$ 391$ a thousand of boxes. From the above analysis, it is more favorable for Kenton accepts the bid from Eire Papers than West Papers.

The net impact of the cost saving will be $\$ 39$ (i. e. $\$ 430-\$ 391=\$ 39$ ). See below computation:- Analysis 2: Bid from Eire Papers $\$ 430$ Vs Thompson Division of $\$ 480$ If Thompson gets the order from Northern, it would buy its linerboard and corrugating medium from the Southern Division of Birch.

Through these transactions, The Birch Papers will gain an overall profit of $\$ 192$ a thousand of boxes which derived from Thompson of $\$ 80$ and Southern Division of $\$ 112$. After contra with the bid of $\$ 480$ from Thompson, the actual cost to Birch Papers Company is $\$ 288$ (i. e. $\$ 120+\$ 168$ ). Compared to Eire Papers, it will be more favorable for Mr.

Kenton to accept Thompson Division as the total cost to Birch Papers will be only $\$ 288$, there is a net cost saving of $\$ 103$. See below computation:Conclusion: In the best interest of Birch Paper Company, Northern Division should accept Thompson Division's bid as it is the lowest cost among the 3 bids. Furthermore, it will optimize Birch Paper Company's profit by helping Southern to increase its capacity and lower its excess inventory. Alternatively, Northern Division could divide the production volume into half, $50 \%$ of the works given to Eire Papers and $50 \%$ of the works gives to Thompson Division.

This is because if Northern Division does not award contracts to the low bidder, for instance Eire Papers whose bid is reasonable low, it will soon find that either no one bids or that the bids are of questionable value in future. Q3) Should the vice president of Birch Paper Company takes any action? Vice President of Birch Paper should take the following action: 1. To correct the misconception made by Mr. James Brunner with regard to the entitlement of
good markup on production for the developmental work done for Northern Division. Under the agreement between these two divisions, Thompson Division was reimbursed by the Northern Division for the cost of its design and development work, Thompson Division received no profit on that.

Under such arrangement, Mr. James Brunner felt that he is entitled to a good mark up for the work done. As a result, the bid that he offers inclusive twenty percent mark up is added and reflected a much higher than its competitors' bid. Our group thinks that the development work that Thompson has done and the bid that Northern Division called for should be considered as two separate issues or transactions. Mr.

James Brunner should charge a profit on the development work that Thompson Division has done for Northern Division, this should be negotiated during the agreement is prepared and stipulated clearly in the agreement. Mr. James Brunner will then be able to quote the bid solely on its production efficiency that is more competitive than its competitors. 2. To set up a transfer price system, there are two ways to set up the transfer price system: Option 1: A Market Price based A market price-based transfer price will induce goal congruence if all the conditions listed below exist:

- Competent People The people involved in negotiation and arbitration of transfer prices must be competent and be interested in the long-run as well as the short-term performance of their responsibilities centres. Good Atmosphere Managers must regard profitability, as measured in their income statements, as an important goals and a significant consideration in the judgment of their performance.

They should perceive that the transfer prices are just. •A Market Price The ideal transfer price is based on a well-established, normal market price for the identical product being transferred- that is, a market price reflecting the same conditions (quantity, delivery time, and quality) as the product to which the transfer price applies. •Freedom to sourceAlternatives for sourcing should exist, and managers should be permitted to choose the alternative that is their own best interests. •Full information Managers must know about the available alternatives and the relevant costs and revenues of each. - Negotiation There must be a smoothly working mechanism for negotiating " contracts" between business units.

If all of the above conditions are present, a transfer price system based on market prices would induce goal congruent decisions, with no need for central administration. In the case of limited markets, the transfer price that best satisfies the requirement of a profit centre system is the Competitive price. Competitive prices measure the contribution of each profit centre to the total company profits. The company can find out the competitive price in an outside market via the following ways: • If published market prices are available, they can be used to establish transfer price.

- Market prices may be set by bids. •If the production profit centre sells similar products in outside markets •If the buying profit centre buys similar products from outside market. Option 2: Cost-Based Transfer Prices If competitive prices are not available, transfer prices may be set on the basis of cost plus a profit. Two decisions must be made in a cost-based transfer price system: 1. The Cost Basis - How to define cost? The usual basis is standard costs.

Actual costs should not be used because production inefficiencies will be passed on to the buying profit centre. If standard costs are used, an incentive is needed to set tight standards and improve standards. 2. The Profit MarkupThe simplest and most wisely used based to calculate the profit markup is a percentage of cost, alternatively, the company can also use the percentage of investment based.

After much consideration, our group thinks that the Market Price Based transfer system should be adopted by Birch Papers Company for the following reasons: a)Both Mr. Brunnr and Mr. Kenton are interested in the long-run as well as short-run performances of their companies and they are competent in negotiation of transfer price. b)They know about the available alternatives and the relevant cost and revenues of each. ) The information of the market price or competitive price are available 3.

To develop a set of procedures for arbitrating transfer price distributes The Vice President should set up a committee with the responsibilities of: -Settling transfer price disputes •Reviewing sourcing changes •Changing the transfer price rules when appropriate. In this situation, Thompson Division could appeal Northern Division's decision to buy the products from outsider, Eire Papers as its capacity is available within the Birch Papers Company. The Committee will then make the sourcing decision on the basis of Birch Paper Company's best interest. In this case, the committee could rule that the transfer price is $\$ 430$ that offered by West Papers and Thompson could only appeal the sourcing decision.

It must accept the transfer price as the competitive price. Q4) In the controversy described, how, if at all, is the transfer price system dysfunctional? Does this problem call for some change, or changes, in the transfer pricing policy of the overall firm? If so, what specific changes do you suggest? A sound transfer price system should be able to accomplish the following objectives: • It should provide each business unit with the relevant information it needs to determine the optimum trade-off between company costs and revenues. - It should induce goal congruent decisions - that is, the system should be designed so that decisions that improve business unit profits will also improve company profits. - It should help measure the economic performance of the individual business units. • The system should be simple to understand and easy to administer. It is, however, Transfer pricing can create a significant problem in integrated companies.

The profit centre that finally sells to the outside customer may not even be aware of the amount of upstream fixed costs and profit included in its internal purchase price. Even if the final profit centre were aware of these costs and profits, it might be reluctant to reduce its own profits to optimize company profit. To overcome the above problems, the transfer pricing policy needs to be change and the following methods could be used: a)Two-step pricing This method is to establish a transfer price that includes two charges: i)First, for each unit sold, a charge is made that is equal to the standard variable cost of the production. i)Second, a periodic (usually monthly) charge is made that is equal to the fixed costs associated with the facilities reserved for the buying unit. One or both of these components should include a profit
margin. b)Profit Sharing A profit might be used to ensure congruence between business unit and company interest.

This system operates as follows: i)The product is transferred to the marketing unit at standard variable cost. ii)After the product is sold, the business units share the contribution earned, which is the selling price minus the variable manufacturing and marketing costs. This method is appropriate if demand for the manufactured product is not steady enough to warrant the permanent assignment of facilities. It does make the marketing unit's interest congruent with the company's. It is, however, profit sharing system produces several practical problems, such as there can be arguments over the way contribution is divided among the business units; arbitrarily dividing up the profits between units does not give valid information on the profitability of each unit; Manufacturing units may feel unfair as the contribution is not allocated until after the sales has been made.
)Two sets of prices In this method, the manufacturing units' revenue is credited at the outside sales price and the buying unit is charged the total standard costs. The difference is charged to a headquarters account and eliminated when the business unit statements are consolidated. This transfer pricing method is sometimes used when there are frequent conflicts between the buying and selling units that cannot resolved by one of the other methods. Both the buying and selling units will benefits under this method.

CONCLUSION Besides the above proposal, our group also suggests that while making the business decision, the management should look into the following transfer pricing factors and considerations: Taxation - the anti-
avoidance legislation provides that if a transaction exists such as the importing of goods from a foreign division or subsidiary at too high a price or the export at too low a price (thus transferring profits abroad), the Revenue can treat the transaction as having taken place at a fair ' arms length' price. Similar legislation exists in the USA where the IRS appears to some observers to be trying to take matters one stage further by forcing companies to adopt transfer-pricing policies that could be held to be based on unsound accounting principles in order to ensure that profits do not get diverted outside the USA. Tariffs - If a country imposes tariffs on imports based on the ' value' of the item being imported, attempts might be made to place a low transfer price on that item. However, governments are aware of this practice and may adopt similar policies to that of the anti-avoidance tax legislation. Currency fluctuations - The main problem of currency fluctuations arises when it comes to the settlement of debts. A common way of reducing the exchange risk is by paying early or late to take advantage of likely movements in exchange rates.

However, attempts may be made to manipulate transfer prices to move funds out of a weak currency and into a stronger one. The primary objective of setting transfer prices is to maximize the profit of the company as a whole. The price should also provide motivation for divisional managers. The situation may be complicated by capacity constraints and limiting factors.

Some element of negotiation between the managers involved will usually be required. Legislation exists to prevent companies avoiding taxation by means of transfer prices.

