

The routines of decision making - math problem example

[Science](#)



The Routines of Decision Making

1. Before making a decision the costs of the two alternatives need to be compared and contrasted. The decision must be based only on relevant information. Relevant information includes the predicted future costs and revenues that differ among the alternatives. Any cost or benefit that does not differ between alternatives is irrelevant and can be ignored in a decision. The reduction in direct labor and variable overhead by 10% alongside with the reduction in direct material costs by 20% must outweigh the price of \$10.50 per a pair of bindings.

Direct material cost reduction: $30 \times 0.2 = \$6$.

Direct labor cost reduction: $35 \times 0.1 = \$3.50$

Variable overhead cost reduction: $(15 \times 10,000 - 100,000) \times 0.1 / 10,000 = \0.5

Total: \$10.00

Minnetonka Corporation should produce the bindings, as the costs resulting from production of the bindings are only \$10.00, whereas purchase price is \$10.50 per pair.

2. The maximum purchase price for the pair of bindings is \$10.00, as this is the cost of production that differs between the alternatives. In case if the price is higher, the company will be realizing a loss.

3. If the production increases from 10,000 units to 12,500, the fixed costs that change between the alternatives allocated to a pair of skis would be the following: $10,000 / 12,500 = \$0.8$. The fixed cost of 100,000 should be considered when making the decision, as it does not differ between the alternatives. Since all the rest of the production costs remain unchanged, we

can simply add the net change in fixed cost from the total cost of production that varies between the alternatives in order to receive the cost of production for a pair of bindings under the new circumstances: $10.00 + 0.8 = 10.80$.

The cost of production has increased and now is greater than the price per a pair of bindings by \$0.30. Under these circumstances Minnetonka Corporation should purchase the bindings from the supplier.

When considering the long run (30,000 sales form by the end of the third year), the fixed overhead that varies between the alternatives per pair of bindings is only \$0.33 ($10,000/30,000$). Under this sales volume the company should produce the bindings itself. However, taking into consideration the conservative police regarding the estimates for the future (opening only one new line), it would be reasonable to postpone with purchase of the new equipment and as the company achieves the sales volume of 20,000 pairs ($10,000 / 0.5$) so that the production price that varies between the alternatives is a maximum of \$10.50, the opportunity should be once again considered evaluating the new circumstances and sales volume projections.

4. Either this way or the other, there are always risks involved in making the decision that cannot be eliminated. They include, but are not limited to production, marketing, and management risks. (Hodder, L. Koonce, L. and Mcanally M. 2001) The following qualitative factors must be considered when deciding on whether to produce or purchase the bindings: production management capabilities; marketing management capabilities; financial management capabilities; available resources (i. e., land, water, capital,

labor); financial position of the business (i. e., profitability, solvency and liquidity); commitment to a new type of enterprise. (Betsch, T. and Haberstroh, S. 2004)

Works Cited

Betsch, Tilmann, and Susanne Haberstroh, eds. *The Routines of Decision Making*. Mahwah, NJ: Lawrence Erlbaum Associates, 2004. Questia. 1 Dec. 2005 .

Hodder, Leslie, Lisa Koonce, and Mary Lea Mcanally. " SEC Market Risk Disclosures: Implications for Judgment and Decision Making." *Accounting Horizons* 15. 1 (2001): 49. Questia. 1 Dec. 2005 .