



Bill Novak wants to extend the Cracker Pop range for all occasions around the year. You now have to decide whether to install a new manufacturing facility, increase labor hours, outsource part of the production, or to choose all three to increase the production of Cracker Pop. On the other hand, you can choose to outsource the entire requirement.

Right on Target!

To increase the production of Cracker Pop, you had to decide whether to install a new manufacturing facility, increase labor hours, outsource part of the production, or to choose all three. You also had the option of outsourcing the entire requirement. You chose a manufacturing capacity of 900,000 units with two working shifts, which was the optimal decision since it had the highest Net Present Value (NPV).

While evaluating different investment decisions, it is advisable to choose the option with the highest positive NPV. It is considered a reliable criterion for comparing different investment proposals.

Your choice of the debt-equity mix to finance the investment was off the mark. A debt-equity mix of 60%-40% was the optimal choice.

Deciding on the debt-equity mix while financing a project is critical because this has a direct impact on the cost of capital. The best way to determine the optimal debt-equity mix is to locate the point at which the cost of capital of the project is the lowest. This is important because, as the cost of capital increases, the NPV starts to decrease, and conversely, the NPV increases when the cost of capital decreases. NPV is often used to evaluate the financial viability of a project and the composition of the debt-equity can impact the investment decision favorably or adversely.

When capital expenditure is involved in an investment decision, depreciation is an important factor that has to be taken into account. Depreciation reduces taxable income and increases cash flow from operations, and this in turn, leads to an increase in NPV.

Changing Seasons...

August 2x06

You had to decide whether to outsource the production of Cracker Pop or to manufacture it in-house.

Your decision was as follows:

- Manufacturing Capacity (units): 900,000
- Number of Working Shifts: 2
- Partial Outsource Plan: No
- Debt-equity Mix: 70%-30%.

Concept Summary

As you would have realized, the rule of thumb to follow while choosing from among investment alternatives or projects is to opt for the one with the highest positive Net Present Value (NPV).

The concept of Net Present Value (NPV) is one of the most important concepts associated with the time value of money. Simply put, NPV compares the value of a dollar today against its value in the future, after accounting for inflation and return. Said another way, NPV is the difference between an investment's market value and its cost.

While evaluating the financial viability of a project, what does a positive NPV indicate? It simply means that the return on the investment made will be more than what you will be spending on the cost of capital. Conversely, a negative NPV indicates that the cost of the project is greater than the returns it can offer.

Almost all investment decisions involve making extensive projections for the future. Consequently, there is a direct impact on the revenues and profitability of a company in the long-term. By applying concepts associated with the time value of money, the financial risk inherent in capital investments is computed well in advance, and therefore, significantly reduced.

