Capital budget recommendation

Economics, Budget

As a dedicated furniture maker and businessman, a clear understanding of the techniques used to assist in capital budgeting is important. There are several techniques used, each having advantages and disadvantages. Within this recommendation, the advantages and disadvantages of each technique will be briefly discussed. Additionally, discuss how each technique will assist in determining the desirable capital budget technique to recommend. Concluding with a course of action Mr. Navallez should take, along with calculation to support the recommended course of action. Capital budget techniques Several techniques can be used to analyze an opportunity to invest in capital. Net Present Value (NPV) allows decision makers to analyze the present value (cost) of a capital investment and determine if the investment will compensate the cash outflow used for capital investment by an excess of the desired rate of return. Management " wants to know the rate of return to expect from investing", therefore, will " use the internal rate of return method. (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 1156)

The internal rate of return produces the actual rate of return on an investment; where as, net present value allows management to select the desired rate of return on an investment. A simple and straightforward technique is the payback period; as the name suggests " payback" this technique " shows how long it will take to recover the initial cash outflow (the cost) of an investment. " (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 164) Although, the payback period furnishes the time period when the cost is likely to be recovered, the technique does not illustrate compensation in excess of the initial cash outflow or assist in evaluating different prospective capital investments. Additionally, modified internal rate

of return technique shows the adjusted rate of return based on the expected return on investment after taxes, however, does not calculate compensation or assist in evaluation of alternatives. For the purpose of the recommendation further discussion of net present value and internal rate of return assist in determining the desired course of action Mr.

Navallez should acquire. The two techniques demonstrate the ability to compare the two prospective investments Mr. Navallez is considering. With reference to each prospective investment within this recommendation each will be referenced as Alternative 1 and Alternative 2. Alternative 1 is the purchase of automated high-tech machinery and Alternative 2 is becoming a representative. Net preset value vs. internal rate of return Net present value (NPV) is determined by " subtracting the cost of the investment from the present value of the future cash inflows. " (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 156) The future cash inflow is a calculation that is computed by taking the future annual cash inflow of the investment (payments), number of periods, and desired rate of return. Two outcomes are determined by the use of this technique, a high rate of return or a below rate of return. The most favorable outcome is a high rate of return; a high rate of return indicates the future cash inflow of an investment is worth the current cash outflow (cost of the investment). In use, the cost of the automated machinery subtracted from present value of the future cash inflows will show the net present value of the investment.

Cash inflow consists of representative fees, working capital recovery due to the decrease in labor and manufacturing cost. Net present value will show whether the prospective investment will compensate in excess of the desired

rate of return. Internal rate of return is a desire rate, also called hurdle rate, or cutoff rate, or minimum rate set by the organization as the expected return on the investment. “ The rate of return is the rate at which the present value of cash inflows equals the cash outflows. ” (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 1156) “ The higher internal rate of return, the more profitable the investment. (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 1160) The internal rate of return is calculated by taking the total values (cash inflow and outflow) and “ guess” (rate of return). This technique assist in the decision making process because once the internal rate of return is determined, the desired investment can easily be decided. Taking the cash outflow and inflow from each alternative and the desired rate of return will offer the best comparison as which investment will present a return favorable. Recommendation The recommendation Mr. Navallez should take is alternative 1. Alternative 1 offers the best return on investment.

The use of the net present value techniques presents the desired return on investment. Net present value over internal rate of return presents the expected return on cash outflows for the cost of the investment, thus allowing management to “ compute a present value index. ” (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 1160) Assume the desired rate of return is 8% over 10 periods, alternative 1 cash inflow would be $421, 834 with cash outflow being $323, 091 and alternative 2 cash inflow of $314, 057 with cash outflow being $283, 930. The present value of alternative 1 is $98, 743 and alternative 2 is $30, 127.

Alternative 1 yields a higher rate of return, however, taking it a step further to confirm alternative 1 is the best investment the present value index offers an additional comparison of the two investments. Present value index is calculated by dividing cash inflows from cash outflows, “ the higher the ratio, the higher the rate of return per dollar invested into the proposed project. ” (Edmonds, Edmonds, Olds, McNair, & Schnieder, p. 1160) Alternative 1 ratio 1. 306 and alternative 2 ratio 1. 106; thus confirming alternative 1 the best investment and the most profitable for Mr. Navallez.