Procurement-One Network
Corporate Cost-Reduction Services
SPEND LESS & flourish

Procurement-One Network

Corporate Cost-Reduction Solutions for Small to Midsize Companies

Cost-Reduction Tip #17:
Cost-Reductions & ROI's

***** Webinar for Execs & Management *****

11am, July 21 2020

Cost-Reduction Bootcamp for Execs

Limited to only 20 Registrants

Bootcamp Package Fee: $150 ($400 value)

Click here for more info

Hello Roger,

Cost-Reduction & ROI's

Skillfully managing your spend categories will reduce your costs up to 20% (or more). While cost-savings are always good, how do you compare competing "good" solutions to identify the right one? That's where ROI (Return on Investment) analysis comes into play to help identify the "best" solution.

Whether you are purchasing capital equipment, software, purchased-services, or direct materials, ROI evaluations will help shine the light as to the best solution for your organization.

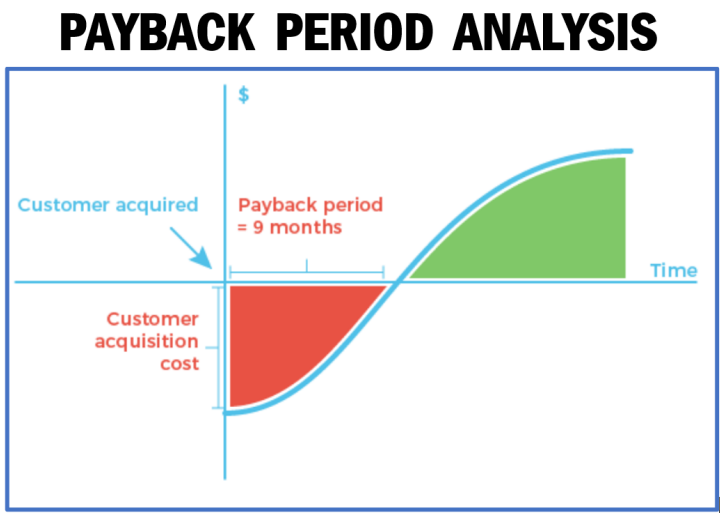
Types of ROI Evaluations:

1. **Payback Analysis**: The time required to recoup investment outlay.
2. **Break-Even Analysis**: Quantity & price needed to recoup investment.
3. **NPV Analysis:** The net dollars the investment will yield over time.

4. **IRR Analysis:** The projected annualized rate of return of an investment

As applicable, it is preferred to do all four ROI metrics to provide the greatest insight for decision making.

Many ROI formulas are relatively easy to understand and to use, especially via a spreadsheet like Excel.



PAYBACK PERIOD

Payback Period is the amount of time (usually stated in months) that it takes to recover the cost of an investment or a purchase. It can be viewed as the length of time needed to reach the break-even profit point.

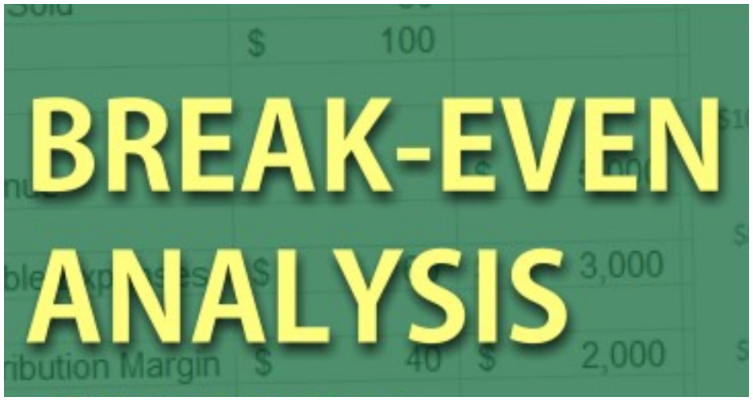
After the Payback Period is reached, it is assumed that net profits will commence immediately. Most companies require a payback period of 24 months or less, but a higher period may be allowed based on the perceived reward versus risk.

Payback Period is rarely used by itself, but it does give a simple investment recovery time perspective missing in BEQ, NPV, and IRR:

Simple Formula: Payback Period = Investment_Cost / Monthly_Savings

Click Link for more info on Payback Period

BREAK-EVEN QUANTITY (BEQ)



While Break-Even point is not strictly a ROI measurement, it does provide an important perspective on the quantity of volume and price needed to achieve a break-even point.

Formally, the Break-Even Quantity (BEQ) is the production level (in units) at which total revenues for a product equal total expenses.

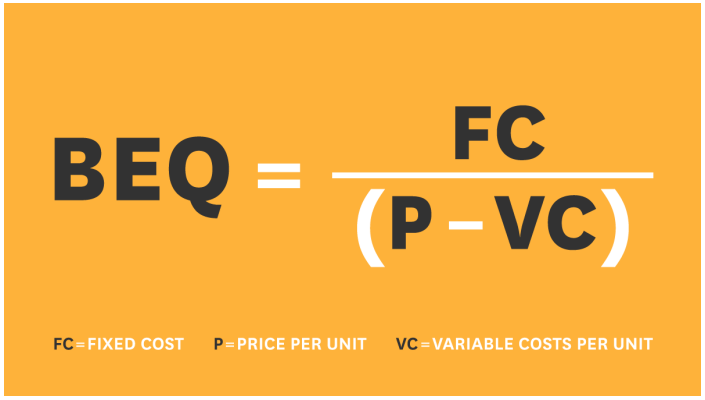
BEQ is typically used for capital equipment, services, and other investments where the output can be described in units, and price and unit costs can be assigned.

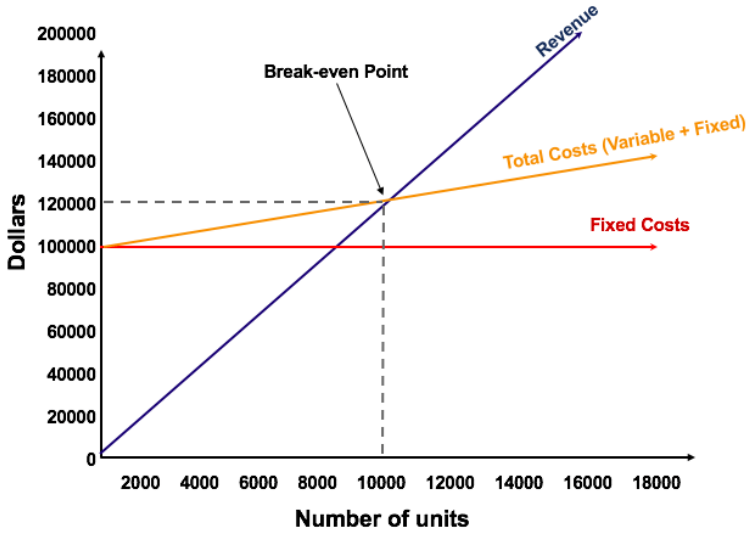
Additionally, it shows how an increase in unit price or a decrease in unit cost will lower the BEQ quantity, reduce BEQ time, and increase profits.

BEQ = Total_Fixed_Costs / (Price_per_Unit - Variable_Cost_Unit)

In this formula, "total fixed costs" refer to those costs that do not change regardless of the number of units sold.

Click Link for more info on BEQ





[INSERT] The Discount Rate: Before we visit NPV and IRR, we need to briefly discuss the Discount Rate (i). The Discount Rate is a % value that is used to reduce the value of future cash inflows. Based on history, we can expect $1 in the future will have less buying power than $1 today.

The Discount Rate can be established by a variety of methods, but each person should seek direction from their own Finance Department. Currently the following are nominal ranges that might be used to establish a Discount Rate:

WACC: 3-11%, (See NYU data)
Small Business Loans: 6-8%, and/or
Opportunity Costs [other investment opportunities]: 5%-15%

Click here for more info on Discount Rate

Net Present Value (NPV):

Net present value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used in

capital budgeting and investment planning to analyze the profitability of a projected investment or project.

Net Present Value (NPV) is one of the most used tools for evaluating a single or multiple competing investment opportunities. Its strength is that it provides the expected net profit results of an investment opportunity in terms of absolute dollars (not a %).

A simple view of NPV:

NPV = TVECF − TVIC

TVECF = Today's value of the expected cash flows (in)
TVIC = Today's value of invested cash (out)

More info on NPV

Excel Syntax: NPV(rate,value1,[value2],...)

NPV Formula:

$$NPV = \frac{R_t}{(1+i)^t}$$

t = time of the cash flow
i = discount rate
R_t = net cash flow

Internal Rate of Return (IRR)

The Internal Rate of Return (IRR) is a measure used in capital budgeting to

estimate the profitability of competing investment opportunities.

IRR is the discount rate that makes the NPV of all cash flows of a project equal to zero dollars.

IRR produces the economic rate of return (%) of a specific project option, but IRR must still be compared to the company's cost of capital (or hurdle rate) to confirm the project is profitable enough to pursue. IRR must be higher than the company's Discount Rate for the project to provide profitable results.

Generally speaking, the higher a project's IRR, the more desirable it is.

Click Link for more info on IRR

Excel Syntax: IRR(values, [guess])

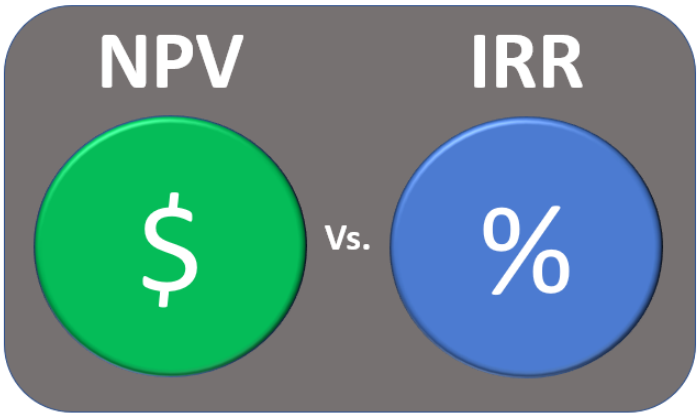
IRR Formula:

$$\text{IRR} = \frac{(\text{Cash flows})}{(1+r)^i} - \text{Initial Investment}$$

Where:
Cash flows= Cash flows in the time period
r = Discount rate
i = Time period

NPV vs. IRR:

Where they're best used and how they work



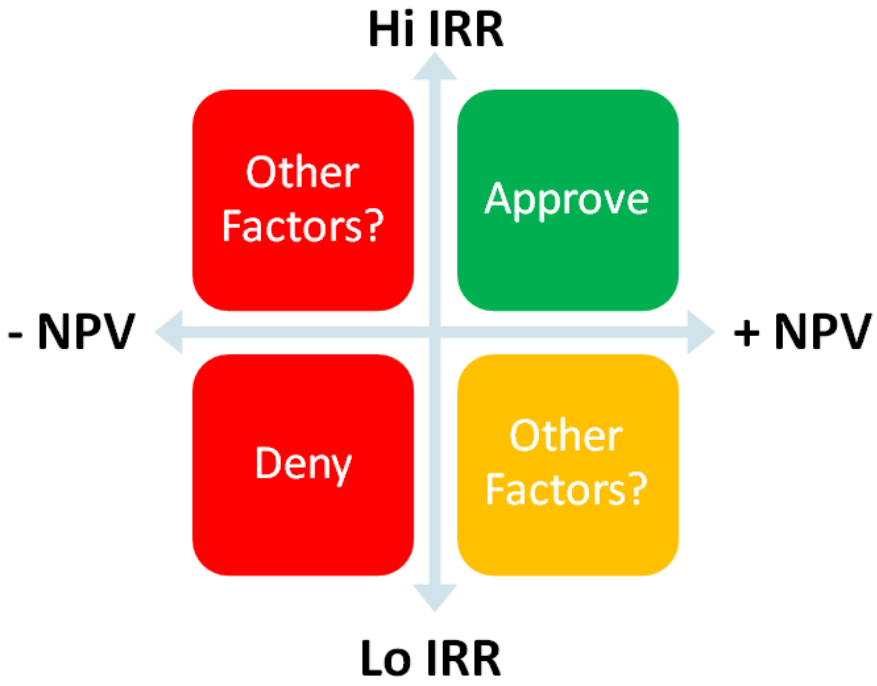
together.

While NPV is important for final decision making, IRR is helpful to understand the degree of a project's return, especially when comparing the IRR's of several competing candidates for the same project.

IRR shows the project's return as a %, while NPV shows the project's return in terms of dollars.

The graph below shows that the highest NPV along with the highest IRR, typically identifies the best viable project candidate.

Click Link for more info on NPV vs IRR



"When you manage a spend category 'well' a 20% (or more) savings results"

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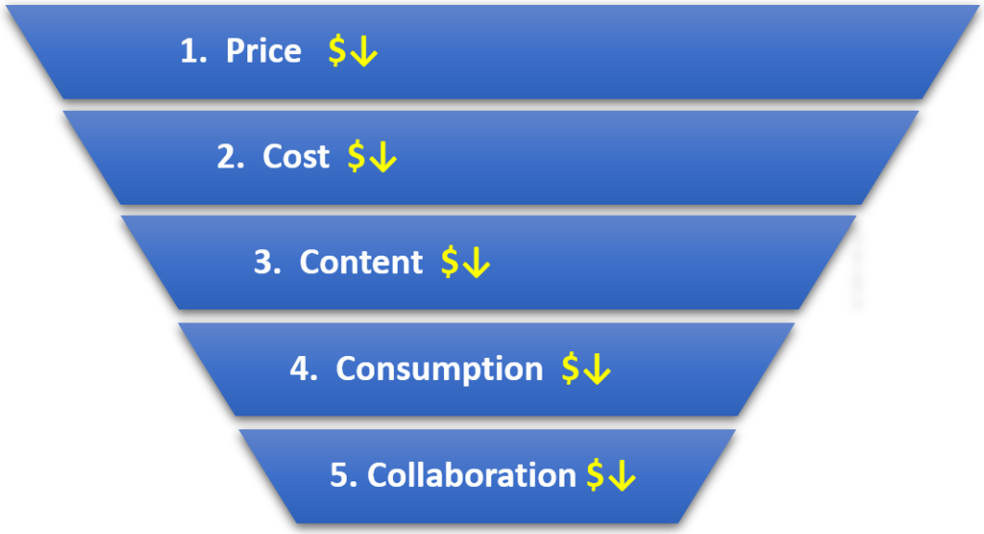
Top Corporate Cost-Reduction Areas & Tactics



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