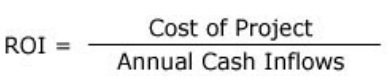
# ROI

## What is ROI?

ROI (Return on Investment) is a relatively straightforward investment metric that expresses how much time is required (the payback period) to recover the original investment. It may also be expressed as a percentage figure -- ROI%. ROI is calculated as:



## Why is choose ROI?

ROI shows the amount of money you expect to make on a particular investment – and that’s an important thing to know. When you only have a certain amount of money to invest, you’ll want to look at the investment that will return the most money in the shortest amount of time

### Total Cost: 927240 $

### Viking Revenue Estimates

|  |  |
| --- | --- |
| Viking License Fee | $650 |
| Viking Dev. License Fee | $1.950 |
| Support Fee | 20% |

Maximum Total Additional: 3338400

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **# Licenses** | | | **# Dev. Licenses** | | | **Volume Discount** |
|  | **Company** | **Year 2** | **Year 3** | **Year 4** | **Year 2** | **Year 3** | **Year 4** |
| **Probable (100%)** | DefCon USA | 375 | 400 | 550 | 20 | 30 | 40 | 20% |
| Big Communications | 325 | 400 | 550 | 20 | 30 | 40 | 20% |
| Starfleet | 200 | 200 | 350 | 10 | 15 | 25 | 15% |
| Global Energy | 185 | 200 | 350 | 10 | 15 | 25 | 15% |
| Chemicals-R-Us | 55 | 50 | 100 | 5 | 10 | 15 | 15% |
|  | Additional Viking Licenses | 1185 | 1300 | 2000 | 70 | 110 | 160 |  |
|  | Additional Revenue from Licenses | $607.100 | $664.625 | $1.014.000 | $103.838 | $159.900 | $232.538 |  |
|  | Additional Support Revenue | $121.420 | $132.925 | $202.800 | $20.768 | $31.980 | $46.508 |  |
|  |  |  |  |  |  |  |  |  |
|  | Total Additional Revenue | $853.125 | $989.430 | $1.495.845 |  |  |  |  |

Minimum Total Additional Revenue (80%): 2670720

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **# Licenses** | | | **# Dev. Licenses** | | | **Volume Discount** |
|  | **Company** | **Year 2** | **Year 3** | **Year 4** | **Year 2** | **Year 3** | **Year 4** |
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|  |  |  |  |  |  |  |  |  |
|  | Total Additional Revenue | 682500$ | 791544$ | 1196676$ |  |  |  |  |

### Revenue

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Year 2 | Year 3 | Year 4 | Total |
| Maximum Total Additional Revenue (100%) | 853125$ | 989430$ | 1495845$ | 3338400$ |
| Minimum Total Additional Revenue (80%) | 682500$ | 791544$ | 1196676$ | 2670720$ |

### ROI calculation:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Total Cost | Total Benefit | ROI (%) |
| Maximum Total Additional Revenue (100%) | 927240$ | 3338400$ | 260,04% |
| Minimum Total Additional Revenue (80%) | 927240$ | 2670720$ | 188,02% |

We have ROI from 188.02% to 260.04%, it shows that project benefit will increase 2 times of the investment after 3 year released. Compare with the bank interest rate is 14%, we can see Viking project has highly return on investment. We can recover the investment after one year if sell license and Dev. License. So, the successful of Viking project is high.

# BREAKEVEN ANALYSIS

## What is Breakeven Analysis?

Breakeven analysis tells you how much you need to sell/save to break even on your investment (in this case, your project). To make the results clearer, they can be graphed.

It is calculated as:

## Why is choose Breakeven Analysis?

Breakeven analysis helps to provide a dynamic view of the relationships between sales, costs and profits

### Total cost: 927240

### Breakeven analysis calculation:

For Viking License Fee: 650 $

|  |  |
| --- | --- |
| Total Cost | Breakeven analysis |
| 927240 | 1427 |

For Viking Dev. License Fee: 1950$

|  |  |
| --- | --- |
| Total Cost | Breakeven analysis |
| 927240 | 476 |

WE can see if we sell 1427 license we can recover the investment, based on Viking Marketing Estimates report in the worst case, in 2nd year we can sell 1185 license, so that, we need only more than one year to recover the investment, that a very good sign to see the viability of Viking project.

# IRR

## What is IRR?

IRR (Internal rate of return) is often used in capital budgeting, it is the interest rate that makes net present value of all cash flow equal zero.

## Why is choose IRR?

IRR is an indicator of the efficiency, quality, or [yield](http://en.wikipedia.org/wiki/Yield_(finance)) of an investment because the internal rate of return is a [rate](http://en.wikipedia.org/wiki/Rate_(mathematics)) quantity.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | IRR |
| Maximum Total Additional Revenue (100%) | -536570 | 792375 | 928680 | 1226675 | 152% |
| Minimum Total Additional Revenue (80%) | -536570 | 621750 | 730794 | 927506 | 116% |

With Internal rate of return from 116% to 152% compare with discount rate (we choose bank interest rate) is 14%. Profitability of the project can be 9-10 times larger than bank interest rate. Based on the estimated data, this project will be successful with a huge profit.