1. **Tool**

* *Breakeven analysis tells you how much you need to sell/save to break even on your investment* (in this case, your project)
  + Breakeven volume = Fixed Costs/ (Revenue per unit – variable costs per unit)
    - Fixed costs: The costs that stay the same no matter how many units are sole
    - Revenue per unit: The anticipated revenue per unit to be received
    - Variable costs per unit: The anticipated costs per unit to be spent

1. **Data**

* ***Viking Development Project Estimated Costs*** 
  + Project Management and Planning: $151,555.50
  + Direct Development Costs: $194,400.00
  + Estimated Hardware and Software Costs: $20,000.00
  + Contingency Budget (20%): $69,191.10
  + Change Budget (20%): $69,191.10
* **Total Estimated Viking Project Costs**: $504,337.70
* ***Viking Revenue Estimates:***
  + *Viking License Fee:* $650
  + *Viking Development License Fee:* $1950
  + *Support Fee: 20%*

1. **Calculation**

* **With Viking License:**
  + *Viking License Fee*: $650 without support
    - Breakeven volume: BL1 = 504,337.70/650 = 776 (Viking License)
  + *Viking License Fee*: $650 with support fee: 20% 🡺 $780
    - Breakeven volume: BL2 = 504,337.70/780 = 647 (Viking License)
* **With Viking Development License:**
  + *Viking Development License Fee*: $1950 without support
    - Breakeven volume: BL3 = 504,337.70/1950 = 259 (Viking Development License)
  + *Viking Development License Fee*: $1950 with support fee: 20% 🡺 $2340
    - Breakeven volume: BL4 = 504,337.70/1950 = 216 (Viking Development License)
* **With average of Viking License and Viking Development License:**
  + *Viking License average Fee*: $2600 without support
    - Breakeven volume: BL5 = 504,337.70/2600= 194 (License)
* 97 Viking License and 97 Viking Development License
  + *Viking License average Fee*: $2600 with support fee: 20% 🡺 $3120
    - Breakeven volume: BL6 = 504,337.70/3120 = 162 (License)
* 81 Viking License and 81 Viking Development License

1. **Analysis**

**Case 1**: Only sell Viking License without support fee

**Case 2**: Only sell Viking License with support fee

**Case 3**: Only sell Viking Development License without support fee

**Case 4**: Only sell Viking Development License with support fee

**Case 5**: Sell Viking License and Viking Development License without support fee

**Case 6:** Sell Viking License and Viking Development License with support fee

**Time** within 3 year

**Unit:** License

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 |
| Year 2 | 258 | 215 | 86 | 72 | 64 | 54 |
| Year 3 | 258 | 215 | 86 | 72 | 64 | 54 |
| Year 4 | 260 | 217 | 87 | 72 | 66 | 54 |
| *Total* | **776** | **647** | **259** | **216** | **194** | **162** |

Base on data and chart, we can know that number of product need sell to break even on our investment. This number is **increase** *from case 6 to case 1.*

If we *assume* with **case 1**, we will sell **22 Viking License/month**. After **3 year** we can get back our investment.

We can believe that our product is *productivity and useful* with *a good marketing strategy* 🡺 22 isn’t a big number.

So, **Viking project is viable**