CASE 17: BUILDING A DECISION SUPPORT SYSTEM

Ski-YA! Is Colorado-based company that sells high-performance ski equipment. When it comes to the serious business of sliding downhill, the Ski-YA! Dudes of Colorado don’t trouble themselves with petty categories: to them, all alpine snow equipment is summed up in one word, AWESOME!

This season’s offerings at Ski-YA! are no exceptions. Skis continue to grow wider for better flotation beyond the groomers, and the side cuts, the stick’s hourglass shape designed to help a skier turn, now reflect the needs of terrain skiers. Even bindings have been rejiggered: forget the drill and screwdriver; the latest fittings snap or slide into place, extending ski life and improving energy transfer.

The Ski-YA! company wants to begin selling a new pair of skis, labeled the Downhill Demons, in the upcoming ski season. It wants to know how many skis it will have to sell in order to break even on its investment in materials and equipment. The chief financial officer has provided the following information:

**FIXED COSTS**

Metal molding machine: $200,000

Milling machine: $150,000

Sander and grinder: $10,000

Presses: $25,000

Silkscreen machine: $50,000

**Variable Cost(per unit)**

Packing material: $5.00

Raw material: $100.00

Shipping $20.00

The marketing department estimates that it can sell the new skis for $400.00 per unit. Further projections estimate that an average of 200 units will be sold per month. The goal is that the skis will break even and start to earn a profit within the first year. Ski-YA! target profit level for the end of the first fiscal year is $100,000.

**SOME PARTICULARS YOU SHOULD KNOW**

1. First, create a break-even analysis where your goal is to determine how many units you must sell to recover all of your fixed costs.
2. Then create a target profit analysis where your goal is to determine how many units you must sell to reach a predefined profit level. The difference between the two is that at breakeven your target profit is zero, whereas when you specify a target profit that is greater than zero, you are setting your goal above the break-even point.
3. You will want to create a table sheet that contains the data used to generate the break-even/target profit chart. This includes 10 data points on either side of the break-even/target profit point.
4. Finally create a chart where you can visually measure your break-even or target profit level along with total fixed and variable costs. If you choose to calculate the number of months before you reach a break-even or target profit, those numbers will be reported here.