Create a Shiny app titled “Pricing Strategy Calculator” using the table below. The columns “Label for Display Purposes”, “Variable Names”, “Type”, “Precision”, and the “Formula” for calculation are provided for each variable (1 variable per row). User inputs are so labeled.

The user will input the input fields: “Units You Sell Annually (variable name=OUS)”, “Your Selling Price per Unit” (variable name=OSP), “Your Gross Profit % (as integer)” (variable name=OGPPi), and “Proposed % Price Change (enter decrease as negative)” (variable name=PIPi).

The app will have a ‘Calculate’ button and a ‘Print’ button, both fully self-contained in the app (no outside software required).

The app will make all calculations for all variables. In addition to the Input Fields, the app will return the following fields for the User to see on the screen:

Total Revenue

Direct Cost per Unit

Cost of Goods Sold

Gross Profit

New Gross Profit %

% Change in Customers (+/-) Without Changing Your Profit

Below this main view, prepare a “Calculation Table” that displays ALL the variables and their amounts, for review of all calculations.

When the Print Button is pressed a pdf is generated showing all of the above (including the “Calculation Table”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Labels For Display Purposes** | **Variable Name** | **Type** | **Precision** | **Formula** |  |
| Units You Sell Annually | OUS | Integer | no decimals | USER INPUT |  |
| Your Selling Price per Unit | OSP | $ | no decimals | USER INPUT |  |
| Your Gross Profit % (as integer) | OGPPi | Integer | no decimals | USER INPUT |  |
| Proposed % Price Change (enter decrease as negative) | PIPi | Integer | no decimals | USER INPUT |  |
| Price Increase % | PIPd | decimal | 2 decimals | (PIPi/100) |  |
| Total Revenue | OTR | $ | no decimals | (OUS \* OSP) |  |
| Gross Profit | OGP | $ | no decimals | (OTR \* OGPd) |  |
| Cost of Goods Sold | OCOGS | $ | no decimals | (OTR - OGP) |  |
| New Selling Price per Unit | NSP | $ | no decimals | (OSP\*(1+PIPd)) |  |
| Gross Profit % (as decimal) | OGPPd | decimal | 2 decimals | (OGPPi/100) |  |
| Scaling Factor to Convert GPM (as integer) into Sales (in $) | SCFi | Integer | 2 decimals | (OGP/NGPPi) |  |
| Gross Profit % (as decimal) | OGPd | decimal | 2 decimals | (OGP/100) |  |
| New Cost of Goods Sold | NCOGS | $ | no decimals | (OCPUS\* NCBi) |  |
| Cost per Unit Sold | OCPUS | $ | no decimals | (OCOGS/OUS) |  |
| New Customer Base | NCBi | Integer | no decimals | ((SCFi/NSP)\*100) |  |
| New Gross Profit % | NGPPi | Integer | 2 decimals | ((NSP - OCPUS)/NSO) |  |
| % Change in Customers (+/-) Without Changing Your Profit | PCUCLi | Integer | 2 decimals | ((NCB/OUS)\*100) |  |