

Instructions to download and load the CLV Calculator

1. Create a new folder (C:\CLVCalculator) and download the excel files
http://www.drvkumar.com/calculator/CLV_data.xls,
http://www.drvkumar.com/calculator/CLV_Cal.xls,
http://www.drvkumar.com/calculator/CLV_Demo.xls,
and <http://www.drvkumar.com/calculator/CLVProg.xls> into the folder.
2. Then open the file 'CLV_Cal.xls'. There are 3 worksheets in this file. The worksheets are 'Enter Values', 'CM Values', and 'CLV Data'.
3. Open the worksheet 'Enter Values'. Go to the Tools (in the Menu) --> Macro --> Macro. This will open a menu (or screen) called Macro. If they are disabled and you get the message as shown below, you need to change the security settings as listed in the instructions



4. Select Macroname = Values.CLV_Cal and Macros in = This Workbook. Then click Edit
5. This will open the Microsoft Visual Basic with a screen named 'CLV_Cal.xls - Values (code)' within another big screen.
6. Scroll down the program code. The last few lines of code is as follows

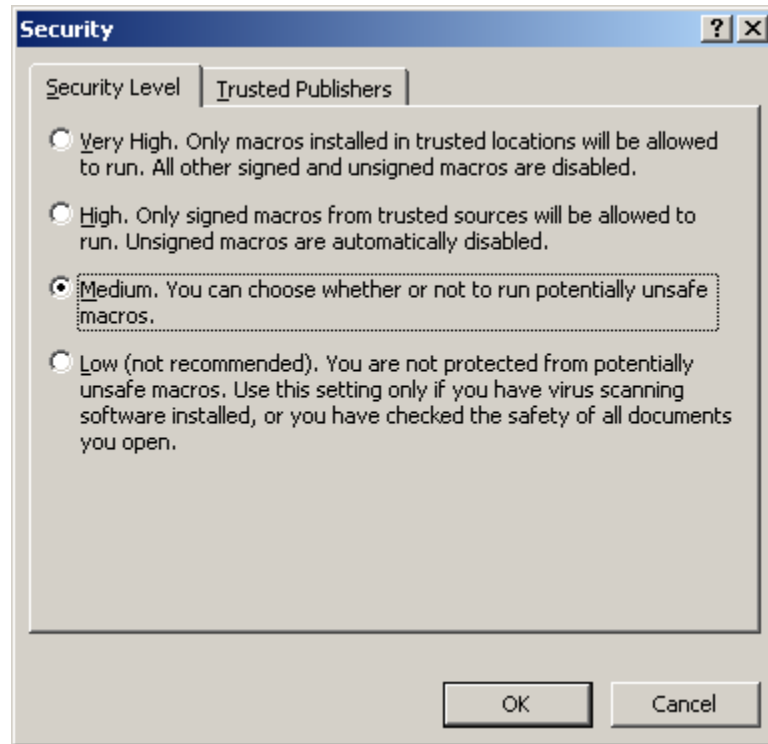
```
"C:\Documents and Settings\Diamond\Desktop\CLVCal_new\CLV_Demo.xls"). _  
RunAutoMacros Which:=xlAutoOpen  
End If  
End Sub
```

7. You need to change one line of code highlighted in yellow. Enter the location of the file 'CLV_Demo.xls' within " ". For example if the file is in C:\MyDocuments\CLV, then you will enter as "C:\MyDocuments\CLV\CLV_Demo.xls").-
8. Once the directory name is changed close the screens (two screens) and come to the worksheet 'Enter Values'
9. Close the file using File Close. This should set up the CLV Calculator.

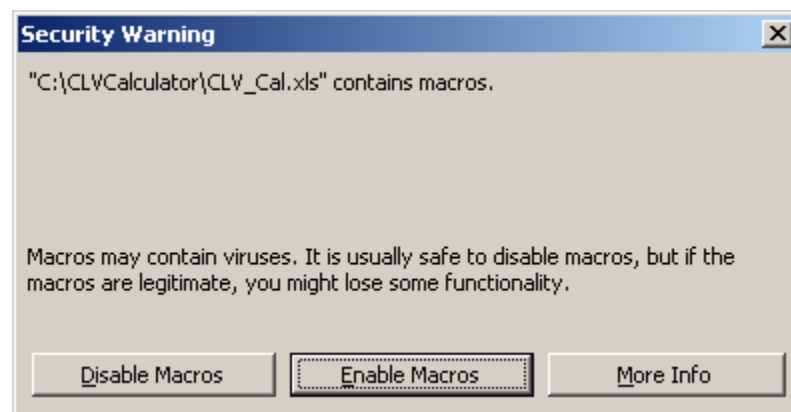
Instructions to run the CLV Calculator

Option 1: When the average CMs (3 AvgCMs), Tenure (3 periods), average number of marketing touches, and Customer No are the only inputs from the user.

1. Before opening any of the files, open MS excel. This will open up a blank excel spreadsheet called Book 1. Go to Tools Macro Security. Set the security level as Medium. Close book 1.



2. Now open the excel file "CLV_Cal.xls". If you see a security warning window, click Enable Macros. Go to the sheet 'Enter Values'



3. Enter Avg_Purchase_freq in the cell against that (i.e. cell "E20"). Press Enter. This will take you to the next cell and continue entering values in the active cells.

The order of entry is

Avg_Purchase_freq Avg_FF_touches / year

Avg_Telephone_touches / year Avg_DirectMail_touches / year

Avg_Email_touches / year AvgCM2004 Tenure0104 AvgCM2005 Tenure0105

AvgCM2006 Tenure0106

The screenshot shows a Microsoft Excel spreadsheet with the following formulas in rows 3 through 16:

- Row 3: $Tenure_{0105} = Dec2003 - MonthofFirstPurchase$
- Row 4: $PredCM_{2005} = -17 + 0.76 * (AvgCM_{0104}) + 4 * (Tenure_{0104}) + 23 * Avg_Purchase_Freq$
- Row 7: $AvgCM_{0105} = Avg(CM_{2001} + \dots + PredCM_{2005})$
- Row 8: $Tenure_{0105} = Dec2004 - MonthofFirstPurchase$
- Row 10: $PredCM_{2006} = -17 + 0.76 * (AvgCM_{0105}) + 4 * (Tenure_{0105}) + 23 * Avg_Purchase_Freq$
- Row 13: $AvgCM_{0106} = Avg(CM_{2001} + \dots + PredCM_{2006})$
- Row 14: $Tenure_{0106} = Dec2005 - MonthofFirstPurchase$
- Row 16: $PredCM_{2007} = -17 + 0.76 * (AvgCM_{0106}) + 4 * (Tenure_{0106}) + 23 * Avg_Purchase_Freq$

Below the formulas is a data entry form with the following fields and values:

Avg_Purchase_Freq =	5	AvgCM ₂₀₀₄ =	470	PredCM ₂₀₀₅ =	595.2
Avg_FF_touches / year =	1	Tenure ₀₁₀₄ =	35		
Avg_Telephone_touches / year =	3	AvgCM ₂₀₀₅ =	495	PredCM ₂₀₀₆ =	662.2
Avg_DirectMail_touches / year =	1	Tenure ₀₁₀₅ =	47		
Avg_Email_touches / year =	10	AvgCM ₂₀₀₆ =	522	PredCM ₂₀₀₇ =	
		Tenure ₀₁₀₆ =	59		

- Once the value for Tenure0106 is entered a new excel file 'CLV_Demo.xls' will automatically open with a prompt to enter the customer No.

The dialog box is titled "Customer Number" and contains the text "Enter the Customer No." Below the text is a text input field containing the number "1". There are "OK" and "Cancel" buttons to the right of the input field.

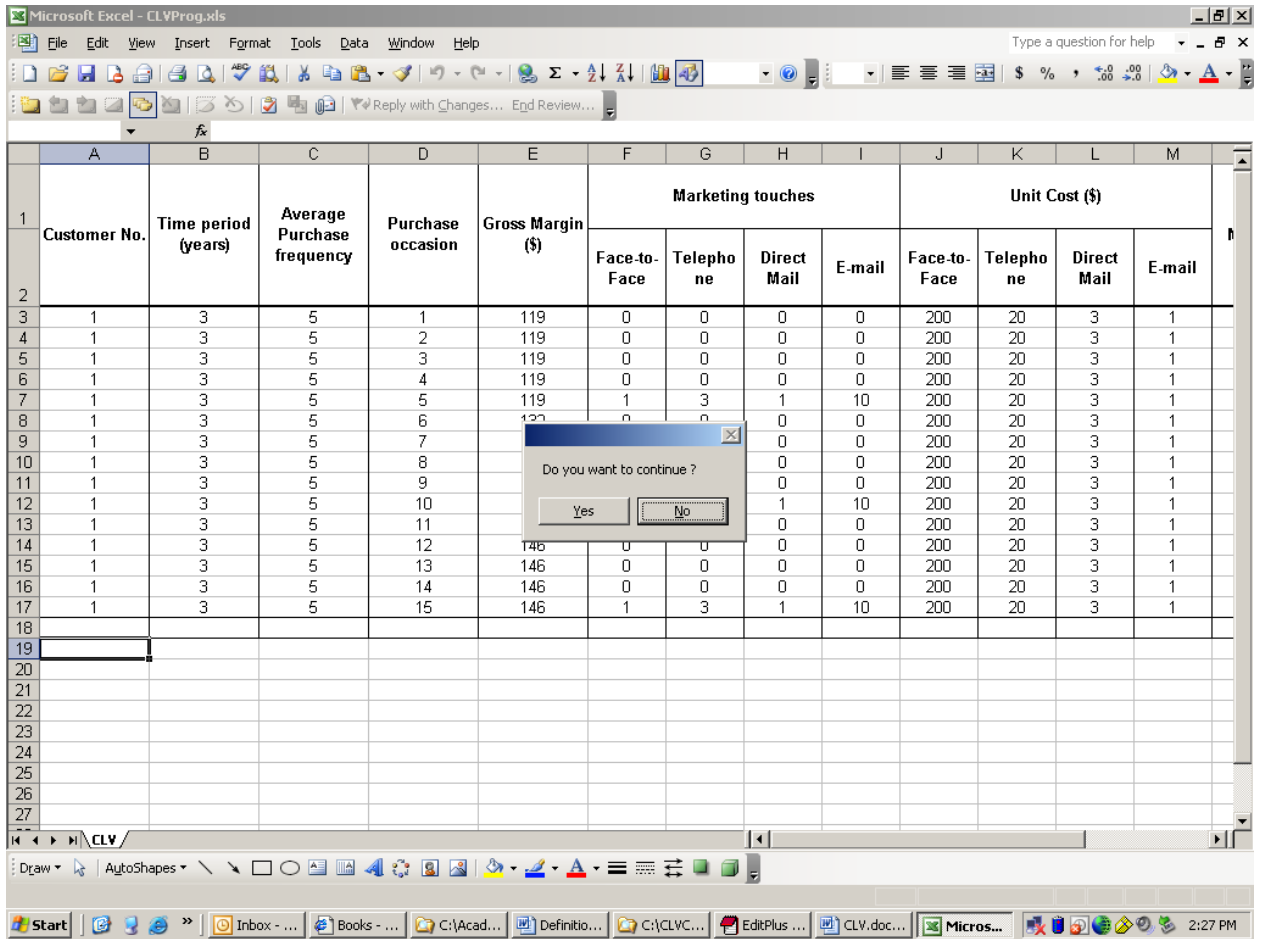
5. Enter Customer No and click OK.
6. This will give a table with cumulative net present value in the right lowermost cell.

	Marketing touches				Unit Cost (\$)				Total Marketing Cost (\$)	Net Margin (\$)	Annual Interest rate (%)	Discounted Net Margin	Cumulative Net Present Value
	Face-to-Face	Telephone	Direct Mail	E-mail	Face-to-Face	Telephone	Direct Mail	E-mail					
1													
2													
3	0	0	0	0	200	20	1	1	0	119	0.12	116.3331149	116.3331149
4	0	0	0	0	200	20	1	1	0	119	0.12	113.7259969	230.0591118
5	0	0	0	0	200	20	1	1	0	119	0.12	111.1773064	341.2364182
6	0	0	0	0	200	20	1	1	0	119	0.12	108.6857341	449.9221523
7	1	3	1	10	200	20	1	1	271	-152	0.12	-135.7142857	314.2078666
8	0	0	0	0	200	20	1	1	0	132	0.12	115.2158701	429.4237367
9	0	0	0	0	200	20	1	1	0	132	0.12	112.6337904	542.0575272
10	0	0	0	0	200	20	1	1	0	132	0.12	110.1095772	652.1671043
11	0	0	0	0	200	20	1	1	0	132	0.12	107.6419336	759.8090379
12	1	3	1	10	200	20	1	1	271	-139	0.12	-110.809949	648.9990889
13	0	0	0	0	200	20	1	1	0	146	0.12	113.7819064	762.7809953
14	0	0	0	0	200	20	1	1	0	146	0.12	111.2319629	874.0129582
15	0	0	0	0	200	20	1	1	0	146	0.12	108.7391658	982.752124
16	0	0	0	0	200	20	1	1	0	146	0.12	106.3022342	1089.054358
17	1	3	1	10	200	20	1	1	271	-125	0.12	-88.97253098	1000.081827
18													1000.081827
19													
20													
21													
22													
23													
24													
25													
26													
27													

7. Close the file "CLV_Demo.xls" using File ---- Close. Then close the file, (using File --- close) "CLV_Cal.xls" when the active worksheet is 'Enter Values'

Option 2: When the user inputs the values for customer No, Time period (usually 3 years), Average purchase frequency, Contribution Margins, Number of marketing touches (face-to-face, Telephone, Direct Mail, and Email), Unit costs of different marketing touches, and Discount rate.

1. Open the file "CLVProg.xls". You will be prompted to enter the values for different variables and it gives the output as a table with Cumulative Net Present Value in the right lowermost cell.



2. If you want to calculate CLV for another customer click Yes in the dialogue box "Do you want to continue?". Otherwise click No.
3. Then close the file using File-----close.