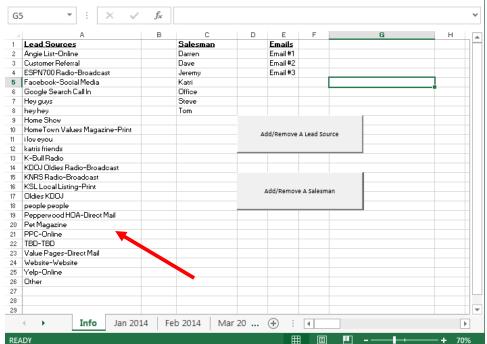
Executive Summary

I created a VBA project for Homestar Windows. This company is owned and operated by my father, Dave Orgill. It specializes in vinyl replacement windows and doors. The business has 12 employees including three secretaries, six salesmen, and 2 installation crews. Homestar Windows advertises through a diverse range of mediums including Home Improvement magazines and newsletter subscriptions, Google Adwords, the radio, Angie's List, Yelp, and Facebook. Homestar diligently tracks how new customers heard about it. It also employs the use of CallSource.com. This company produces 20 different phone numbers that Homestar utilizes. A different phone number is used on each advertising medium. When someone calls in, callsource.com recognizes the phone number and matches it to an advertising source. That way, Homestar knows where people are learning about its products.

My projects simplifies and automates the lead tracking process for Homestar's lead secretary. It allows the user to input new lead information, produces executive level lead information, and brings in comparative data from callsource.com.

Project Scope

My project's workbook consists of 13 worksheets. The first worksheet, labeled "Info" contains the master lists for the rest of the workbook. The other 12 worksheets contain templates for a corresponding month of the current year. This is where the secretary

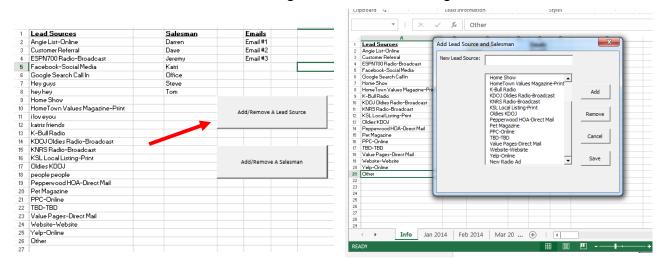


inputs and updates lead information.

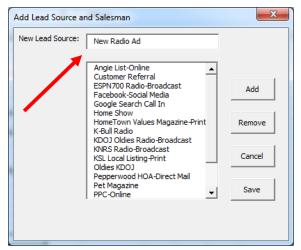
The "Info" worksheet contains three lists—"Lead Sources", "Salesman", and "Emails." The Lead Sources list contains all the different mediums through which Homestar can generate a new lead. This is the

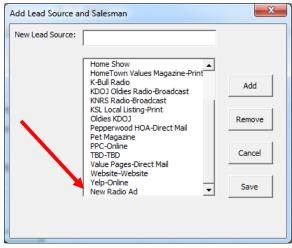
Master list and it is dynamic. Every change that is made to this list will be replicated on (almost) all the worksheets.

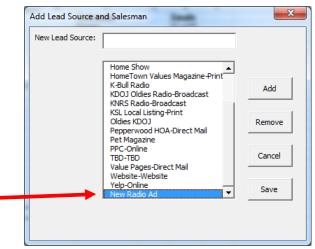
Lead Sources on this list are easily added or removed by clicking on the "Add/Remove A Lead Source" button. A user form is generated after clicking on the button.

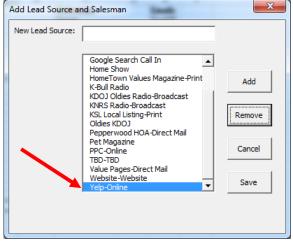


This form automatically populates a list box with all the lead sources that are currently in the Master List. The user types a new lead source into "New lead Source" text box. After writing a source, the user clicks the "Add" button. This source is then added to the list box. The code prevents a user from adding a blank entry to the list. The user can also select (highlight) a lead source that is currently shown in the list box. They can then click on the "Remove" button. This removes the item from the list box. If the user clicks on "Cancel", any changes made to the list box will not be saved and the original version of the Master List will still be retained on the "Info" worksheet. After the user has made all the necessary changes he/she can click on the "Save" button. After "Save" is selected, the previous Master List is cleared. The updated Master List is printed column A. However, first the "Other" item is removed from the list. The update list is alphabetized, and then "Other" is added back to the end of the list.

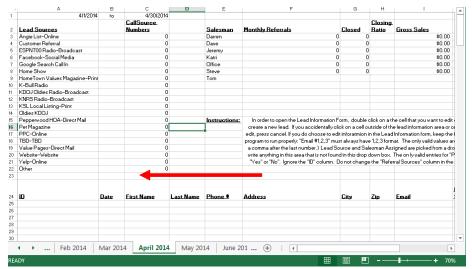




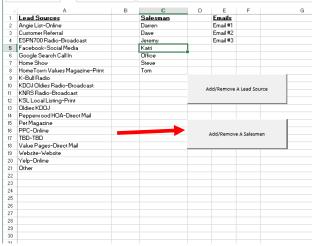




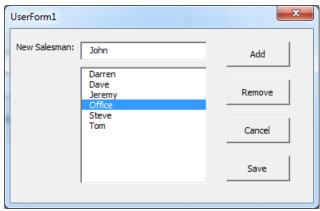
Then the Master Lead Sources List is replicated on each of the worksheets that correspond to the month. Almost. The list is actually only replicated onto each worksheet that corresponds to either the current month or a month in the future. For example, if you made a change to the Master list in April, only the lists on Worksheets April 2014-December 2014 would be updated to reflect these changes. On each of these worksheets, extra rows are added if the updated Master Lead Sources List is has more items than the original and rows are deleted if the updated Master List has less items than before. Don't worry, rows will only be added/removed at the bottom of the original Master List on each sheet. That way, no data is lost.



The user can also click on the "Add/Remove A Salesman" button. After clicking on this button, another user form is generated. This user form works in almost the exact same



way. The user form is populated with the items currently on the Master Salesman List, the user can add or remove items. After being saved, the list is alphabetized, and then the rest of the worksheets corresponding to months are updated accordingly. The only

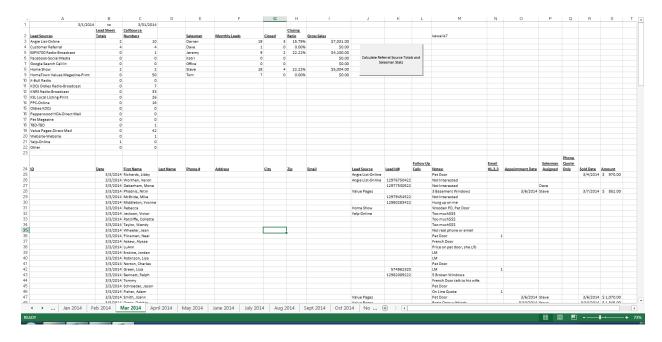


difference with this list is rows are not added or deleted based on changes to this list. The reasoning behind this is based on the assumption that there will never be more Salesman than Lead Sources.

The user can ignore the "Emails" list. This list used later to populate the Lead Information form.

Each of the remaining worksheets that correspond to a month of the year are formatted exactly the same. The upper portion of these sheets contains a copy of the Master Lead Source List, the Salesman List, as well as columns for total leads from each source, the corresponding callsource.com numbers, and columns that tell how many leads each salesman is being assigned, how many he is closing, his closing ratio, and the gross sales that relate to his closed leads. The lower portion of these worksheets is

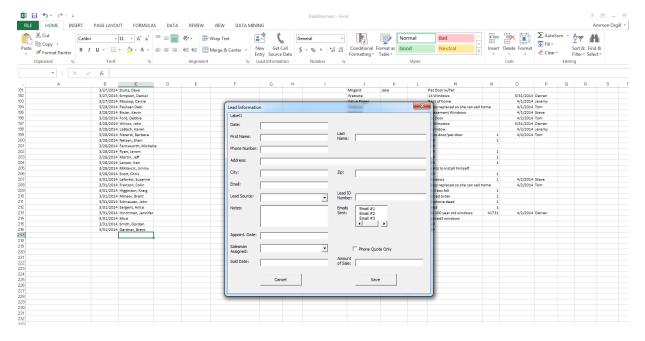
where the secretary stores all the lead information such as first and last name, phone number, address, the lead source, notes, appointment date, salesman assigned, and amount of sale.



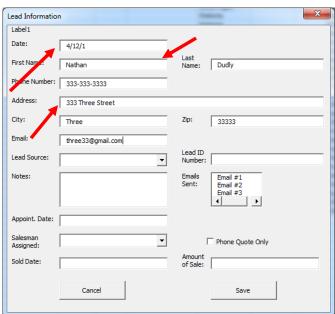
This is where the secretary will spend most of his/her time. In the home ribbon, there is a section labeled "Lead Information." The user can click on "New Entry" to input data for a new lead.



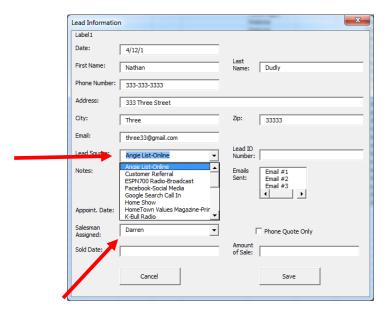
This button runs a macro that automatically takes the selected cell down to the row the first empty row in the Lead Information section. Then another user form is generated. Here, the user can input all the data that corresponds to the new lead.



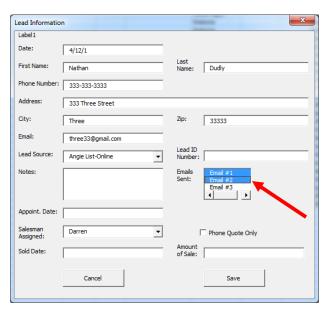
They can enter all the information into the text boxes.



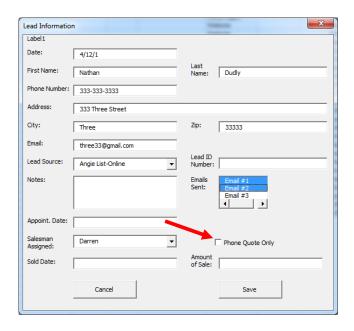
They can select a lead source and salesman from drop down boxes.



They can highlight how many follow up emails have been sent.

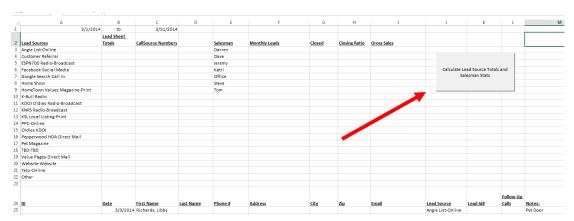


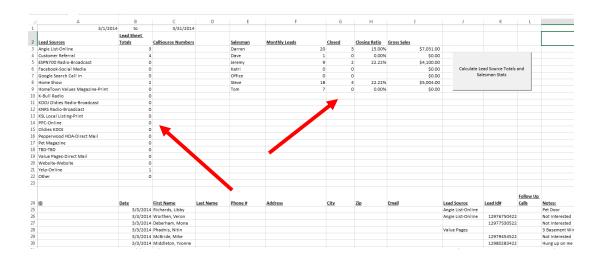
They can also mark if the new lead was a phone quote only.



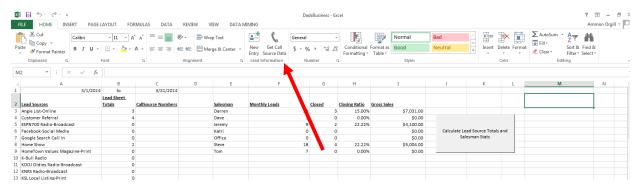
If the "Cancel" button is selected, then the information is not saved. If "Save" is clicked, then the information entered in the user form is saved onto the currently selected worksheet in the row of the active cell and in the correct corresponding columns. If the user wants to edit any information in an individual row, they just need to double click on any cell in the row. This will automatically bring up the Lead Information user form.

As the list fills up, it becomes valuable to see totals of how many leads have come from each lead source. Also, the secretary wants to see how many leads have been assigned to each salesman to guide her in future lead assignments. The owner also wants to see how well the salesman are doing at closing the leads they are assigned. The user can then click on the "Calculate Lead Source Totals and Salesman Stats" button. These numbers will then automatically be generated for each lead source and for each salesman.



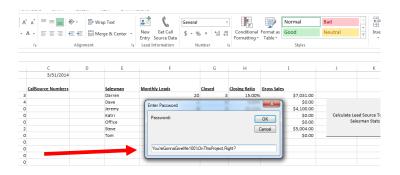


Finally, the user can compare the data the secretary has recorded in the spreadsheet to the data that callsource.com generates. In the home ribbon under the "Lead Information" section, the user can click on "Get Call Source Data."

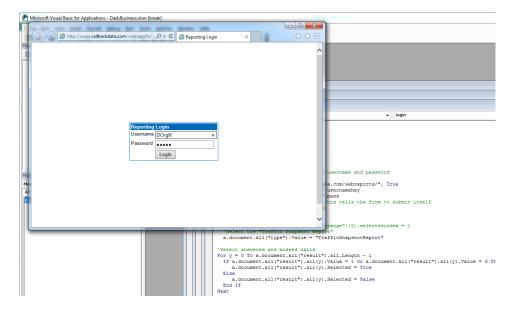


This then brings up two input boxes. These boxes prompt the user to enter the username and password for Callsource.com.

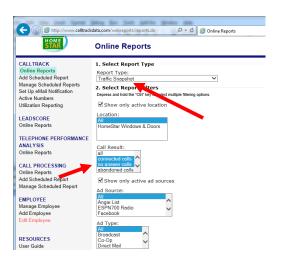




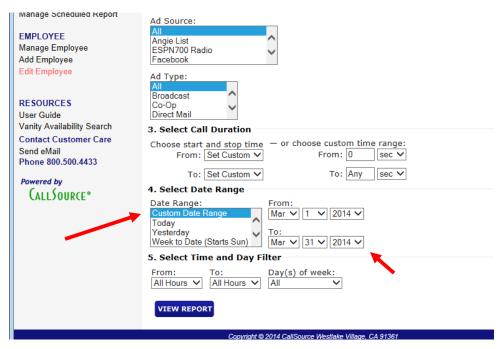
This information is then used to login to callsource.com. Using the agent method, internet explorer brings up callsource.com, enters the credentials and selects the "Login" button.



Then the program selects options from the drop down boxes on this website—"Traffic Snapshot Report", "Connected Calls" and "No Answer Calls."

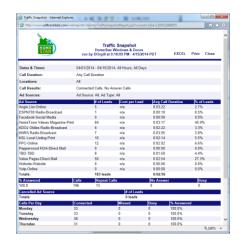


Then, then the correct Date Range is selected based on whatever month the active worksheet corresponds to. For example, if it is April 12 and you are in the "March 2014" worksheet, the program will select "Custom Date Range", and "Mar 1, 2014-Mar 31, 2014."

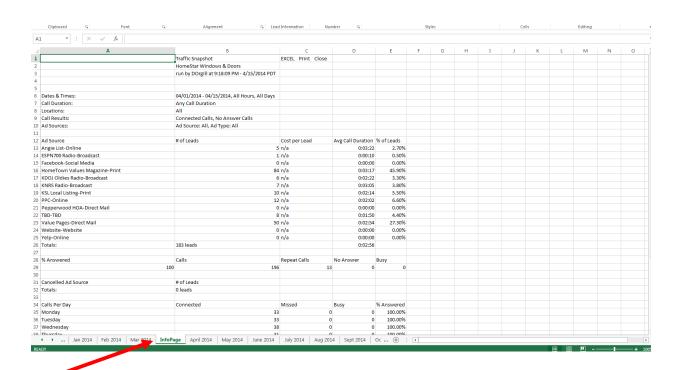


However, if it is April 12 and the user is in the "April 2014" worksheet, then the program will select "Month to Date" for April. Then the "View Report" button is automatically clicked.

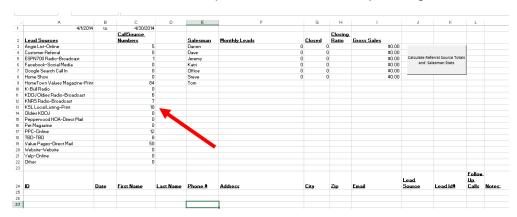
After clicking this a new internet explorer window is created. This brings up the following screen with all the lead source data for the month that callsource.com has collected.



The agent in the VBA code attaches onto this new window. This whole page is then downloaded into Excel onto a newly created worksheet "Info Page."



Then the program pulls in the "# of leads" for each lead source and inserts it into the worksheet that corresponds to the month. The Lead Source Master List and the list from callsoure.com do not need to match up exactly. The program goes through each item on the Lead source list and matches it up with the items on the callsource.com list. Then the number of leads is pasted into the corresponding cell.



Then the "Info Sheet" is deleted. The active worksheet now has all the callsource.com numbers inserted.

Discussion of Learning and Conceptual Difficulties Encountered

I learned an enormous amount about VBA while doing this project. First and foremost, I learned that I could do many thing with VBA on my own without the help of an example in class. I thought that I would always need a similar replica of the project I was working on to reference in order to successfully make VBA work. But this project proved to me that I could make a cool program without the use of a prototype to go off of.

I ran into some difficulty with the new window that Internet Explorer produced. I couldn't figure out how to attach to a new agent window. Luckily, Gove helped me solve this problem by using the .attach function that is written into the agent model.

```
a.waitForLoad

a.attach "http://www.calltrackdata.com/webreports/reports/TrafficSnapshotReport.jsp?rvcount=1&d="a.waitForLoad"
```

I also had a difficult time selecting two options from a drop down menu while controlling Internet Explorer. I tried a million different things but I couldn't figure it out. Finally Gove helped me to use an If..Or.. Statement and change the .selected attribute to select two options at once.

I learned how to insert new rows and remove rows using VBA.

```
🚜 DadsBusiness.xlsm - Module4 (Code)
                                                                                                                                          (General)

→ addARow

              'Debug.Print today
              'Debug.Print ws.Range("c1").Value
               Only add/remove rows for New lead sources for sheets that correspond to current and future months
              If today < ws.Range("c1").Value Then
                  coday < ws.sange( cf ) .value file:
ws.Range(ws.Range("A3"), ws.Range("a3").End(xlDown)).Select
numberOfRows = Selection.Count
'Debug.Print numberOfRows</pre>
                       If leadSourceCount > numberOfRows Then
                            rowsNeeded = leadSourceCount - numberOfRows
                           For x = 1 To rowsNeeded
                                 ws.Cells(1, 1).Select
Selection.End(xlDown).Offset(1, 0).Select
                                 Selection.EntireRow.Insert shift:=xlDown
                            Next
                        'Delete rows
                       Else
                       rowsNeeded = numberOfRows - leadSourceCount
                        deleteARow ws, leadSourceCount, rowsNeeded
                       End If
                   'Clear the current lead sources
                   ws.Range(ws.Range("A3"), ws.Range("a3").End(xlDown)).Clear
                 'Paste the lead sources from the "Info" sheet
ws.Range("a3:a" & leadSourceCount + 2).Value = Worksheets("Info").Range("a2:" & Worksheets("Info").Range("a2")
```

I mastered Loops and If statements. I finally mastered using .end(xlup/down/right/left). For some reason, I never really understood how those worked until this project. I created three user forms on this project and I feel very competent in creating these now. I also learned how to add new buttons to the ribbon. This is one of the coolest things I've learned how to do!

Assistance

I'm not sure what classifies assistance as "substantial" but I did receive help from Gove on several occasions and a lot of help from Nathan. They helped me work through some of the problems that I ran into. Although, I feel that for the most part, I wrote all of my code.