

Executive Summary

In a business world of expanding technology, more and more time is spent each day manually running processes that could easily be automated. In every company, valuable time can be saved and human error can be prevented by automating repetitive tasks. I work for Prosper, a local one-on-one education company. I work in the marketing department and am required to run several reports on a repetitive basis. One such report regards our process of exporting leads to another company. This task takes time and is prone to error. In order to make myself more productive and the export report more accurate I have written a program to build this report and email the details to Prosper's accounting department. This information allows Accounts Receivable to ensure invoices are correct and sent in a timely manner.

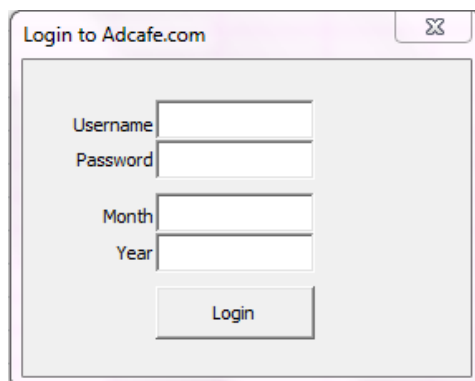
The Program

For my final project I proposed using VBA to import leads from Prosper's web interface www.adcafe.com. After the leads are imported I run some calculations to ensure I have the correct data and then multiply the amount of leads by the specified price per lead. Once these calculations have taken place an email is sent to the specified email address with the information and instructions instructing accounting whom to bill.


To make it simple to run this program I added a custom button to the user interface home tab. I called the button "Run Export" so the user knows what is happening.



After clicking on this export button, I created a user form to request the required information. This user form specifically asks user credentials for www.adcafe.com and the month and year for which you'd like to run this report.


A user form titled "Login to Adcafe.com" with a close button (X) in the top right corner. The form contains four input fields: "Username", "Password", "Month", and "Year". Below these fields is a "Login" button. The form has a light gray background and a thin black border.

After receiving this information, I create an agent to open and navigate through Internet Explorer. The first page that is visited is the login page at www.adcafe.com/contact_us.php.



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Contact Us

Thank you for your interest in AdCafe. Please follow the instructions below to submit a comment or question. We will respond within one business day.

Call:
800.370.4513

Email:
sales@adcafe.com

Address:
5072 North 300 West
Provo, UT 84604

Username

Password

Login

Sign Up Now!

1. Please type your comment or question here.

2. Please enter your name and Email Address carefully below.

Full Name:

Email:


* indicates required fields

The information that was provided on the user form is then entered into the username and password field and the form is submitted. This brings us to a screen in which the user is required to select which responsibility they want to use inside the Adcafe system. For our purposes the program chooses the Marketing Manager responsibility.

Choose responsibility

[Affiliate account manager](#)
[Marketing Manager](#)
[Processing](#)
[Targus](#)
[Creative Designer](#)
[ExportAdministrator](#)
[TrialInstallment](#)

After choosing the responsibility, the Marketing Manager home screen is shown. From this home screen the header tab “Exports” is selected and the subhead “Review Export Requests” is clicked.



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LEADS
CUSTOMERS/ORDERS
WEB ACTIVITY
CAMPAIGNS
AFFILIATES
PARTNERS
REFERENCE
REPORTS
EXPORTS
SMARTCODES
OPTIONS
SIGN OFF

Review export requests

1 of 1

Date Range
Start Date 04/07/2011
End Date 04/07/2011
Report by Affiliate
SubID?
Search

Filters
Affiliate
Campaign
Lead type
Link
Traffic
Manager

Results

| Affiliate | Clicks | Acquisitions | Conversion | Payout | Revenue per acquisition | Opt Ins | Lead consultations | Order clicks | Orders (regular) | Bump Orders | Order consultations | Bump order consultations | Download clicks | Link Description |
|--------------------------------------|---------------|--------------|--------------|------------------|-------------------------|--------------|--------------------|--------------|------------------|-------------|---------------------|--------------------------|-----------------|--|
| Totals | 22,306 | 874 | 3.92% | 11,873.75 | 8.06 | 1,084 | 25 | 763 | 84 | 24 | 29 | 19 | 177 | |
| ABC Service Corp | 1 | 0 | 0.00% | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Accelerated Marketing Solutions, Inc | 1 | 0 | 0.00% | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| AdCafe | 922 | 10 | 1.08% | 0.00 | 19.69 | 8 | 0 | 30 | 3 | 0 | 1 | 0 | 108 | |
| AdCafe Online | 35 | 0 | 0.00% | 0.00 | 0.00 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | Saveolgy 0 outside US traffic redirect |
| Adcafe Search | 427 | 0 | 0.00% | 0.00 | 0.00 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | Click Booth - CPC |
| Ads4dough | 85 | 1 | 1.18% | 135.00 | 97.00 | 2 | 0 | 4 | 1 | 0 | 1 | 0 | 1 | |
| Adspire inc | 122 | 6 | 4.92% | 249.00 | 22.83 | 6 | 0 | 9 | 2 | 0 | 0 | 0 | 1 | |
| Advanced Media, Inc | 1 | 1 | 100.00% | 3.50 | 0.00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Close

After the “Review Export Request” subhead has been selected the program is then displayed the Export Home screen.

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LEADS CUSTOMERS/ORDERS WEB ACTIVITY CAMPAIGNS AFFILIATES PARTNERS REFERENCE REPORTS EXPORTS SMARTCODES OPTIONS SIGN OFF

Multiple Prior Next New Erase Query

Export request

Name Short Name
Export type Export type (lead quality)
Alert name
Description
Delay (days) Date interval
Interval unit Campaign name
Export file name All records validated through
Last run date

Campaign lead type
Lead type
Lead quality Delay Export

Failed exports
Export date Export status Alert status

Successful exports
Export date Export status Alert status

Cancel Query Run Query Cancel

The Export name has been hardcoded into the program. The program can search by the specific name that this report is for. The program will enter the program name into the Export Name field and run the query. This returns the results of the Export Query.

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LEADS CUSTOMERS/ORDERS WEB ACTIVITY CAMPAIGNS AFFILIATES PARTNERS REFERENCE REPORTS EXPORTS SMARTCODES OPTIONS SIGN OFF

Multiple Prior Next New Erase 1 of 5

Delay (days) Date interval
Interval unit Days Campaign name
Export file name All records validated through 05/02/2009 23:59:59
Last run date

Campaign lead type
Lead type
Lead quality Delay Export

Failed exports

| Export date | Export status | Alert status |
|---------------------|------------------------------------|--------------|
| 05/20/2009 01:33:45 | 2 posts failed. 1 posts succeeded. | Alert sent |
| 05/22/2009 01:32:11 | 1 posts failed. 2 posts succeeded. | Alert sent |
| 05/23/2009 01:32:28 | 2 posts failed. 2 posts succeeded. | Alert sent |
| 05/24/2009 01:33:58 | 2 posts failed. 7 posts succeeded. | Alert sent |
| 05/25/2009 01:32:45 | 3 posts failed. 2 posts succeeded. | Alert sent |
| 05/27/2009 01:31:29 | 4 posts failed. 1 posts succeeded. | Alert sent |
| 05/28/2009 01:31:15 | 1 posts failed. 3 posts succeeded. | Alert sent |

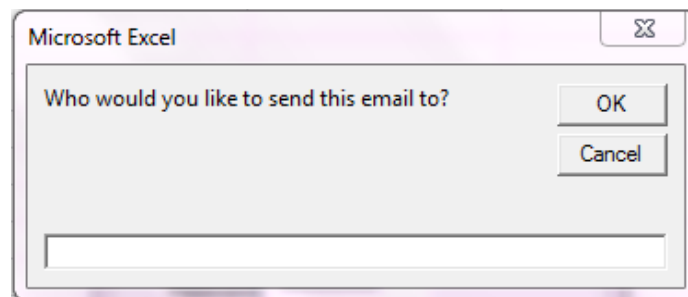
Successful exports

| Export date | Export status | Alert status |
|---------------------|--|--------------|
| 05/21/2009 01:32:08 | All posts successful. 3 posts succeeded. | None |
| 05/26/2009 01:31:23 | All posts successful. 0 posts succeeded. | None |
| 05/29/2009 01:31:04 | All posts successful. 2 posts succeeded. | None |
| 06/01/2009 01:30:28 | All posts successful. 1 posts succeeded. | None |
| 06/23/2009 08:42:03 | Successful | Successful |
| 06/24/2009 01:25:44 | Successful | Successful |
| 06/25/2009 01:33:34 | Successful | Successful |

ReQuery Query Cancel

Adcafe does not allow a user to search exports by date. Therefore, the program queries all possible exports and then imports all the data into a new sheet. Once all the data has been imported into Excel, the program deletes all the data that is not associated with the specified month and year. Once the data has been filtered down, the program then strips all the unnecessary information. The export date column is then formatted to Month Day, Year rather than the date/time format it was in. The number of exports per day is shown in the 2nd column. The 3rd column is used to calculate the amount of money the other company should be billed.

Once all this has been completed the program asks the user for an email address in which to send the information for the invoice.



Once an email address is specified the program compiles an email and uses an Outlook application to send the email. This was most convenient since Prosper only uses Outlook for emailing. Every employee will have Outlook open and therefore the program can successfully control Outlook using the VBA code from Excel. Once a new Outlook application has been created, the program appends the To Field as the email address specified in the previous step. The program then builds the body of the email by using the Month and Year specified at the beginning and by pulling in the calculated sums of leads and cost for the said month. The email will look like this:

Unique Leads Export

Carson < >

Sent: Sat 4/9/2011 1:47 PM

To: @gmail.com

Please bill Unique Leads \$ 1,312.20 for the 6561 leads we sent them in July2010

Once this email has been sent the program is done running and the spreadsheet can be saved for future reference.

The documentation describes the program in each step of the process. Several specific aspects that were learned in class have been used in this system. The program uses:

- Web Agent
- Emailing
- Custom User Interface
- User Form
- Formatting sheet

Key Learnings

During the course of building this program there were several new things I had to discover. Using www.adcafe.com proved to be the most difficult part of this project as the HTML of the site was extremely sloppy and all the code was rendered by javascript. Therefore none of the items I was trying to find in the code had ID's or name's so I could not use the following code to find items I was looking for.

```
a.explorer.document.body.all(ID or Name)
```

I talked to Professor Allen and he helped me use the following code to find the HTML items I was looking for.

```
For x = 1 To a.explorer.document.body.all.Length - 1
    temp = ""
    On Error Resume Next
    temp = a.explorer.document.body.all(x).innerHTML
    On Error GoTo 0
    If InStr(1, temp, "Marketing Manager") > 0 And a.explorer.document.body.all(x).tagname =
"A" Then
        a.explorer.document.body.all(x).Click
        Exit For
    End If
Next
```

In order to ensure that this program worked with both the 2010 and 2007 versions of Excel I had to create 2 separate custom User Interfaces. I had never actually added a custom interface to the ribbon and found it to be fairly simple, but I had to learn how to do it by following the instructions that had been posted on canvas.

The last key thing I had to learn in order to build this program is how to send an email. I attempted using the example from class, but due to the need of using Microsoft Exchange instead of gmail it was difficult to find the appropriate information to do this, especially since several different people will be using this report. I found the easiest way to accomplish sending an email and allowing multiple people to be able to send it is to use a Microsoft Outlook application. This application creates a new email in Outlook and sends it using the current Outlook configuration.

Conclusion

This program not only fulfilled the approved proposal, but will also provide a great value to Prosper. It allows users to click a button and gather vital information. Previously this took valuable time and often had several errors and required more time to fix the errors. This will save Prosper time and money by providing the accounting department with the correct information in a timely manner.