

Business Development Database Automation

Awesome Adobe Automation



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MBA 614

VBA Final Project

Executive Summary

The Circumstance:

I am currently the newest manager in the Strategic Solution group at Adobe Systems. We provide Strategic Value Assessments (SVA) for enterprise – class clients who are preparing to spend millions for the Omniture Online Business Optimization Suite. These SVA's provide clients with information and recommendations on how to close the gap between their current efforts and those online strategies that are employed by “best in class” organizations. Part of my many engagement responsibilities is to match our clients with potential strategic partnerships that may offer valuable services and technological advantages which have strategic impact. In order to discover such potential partnerships, I must manage and dive deep into a wildly robust database (hundreds of partners, dozens of worksheets) for Adobe Systems. Therefore, I chose to focus on automating the process of matching potential partners with enterprise SVA clients.

The System:

I built a series of userforms that could search the database workbook for the top ten partners for five client development areas. I then programmed the ability to automatically create a new client worksheet that was auto populated with the query results. The results that would be delivered would be the partner name, partnership status, and relevant technology / service to be proposed to the client. This new worksheet was programmed to be auto-formatted so that once the code was enacted; the new client worksheet had a populated, formatted table with which any Solution Strategy Manager could pursue next steps.

Implementation Documentation

VBA changed my life...and has kick started my career! I was originally worried that I would not get this project done and would have to settle for the “B” option. I then, however, found a project that was directly relevant to my job and found that I could use some of my part-time hours working on this. The value I have already realized with the Home Depot engagement (our latest client) has been noticed by my boss and others. I am worried that I have set the expectations too high in terms of my skills and prowess as I have had several requests for similar efforts on other databases. I will do what I must...

The process took several traunched steps, which I will outline and illustrate in the following pages.

Step 1:

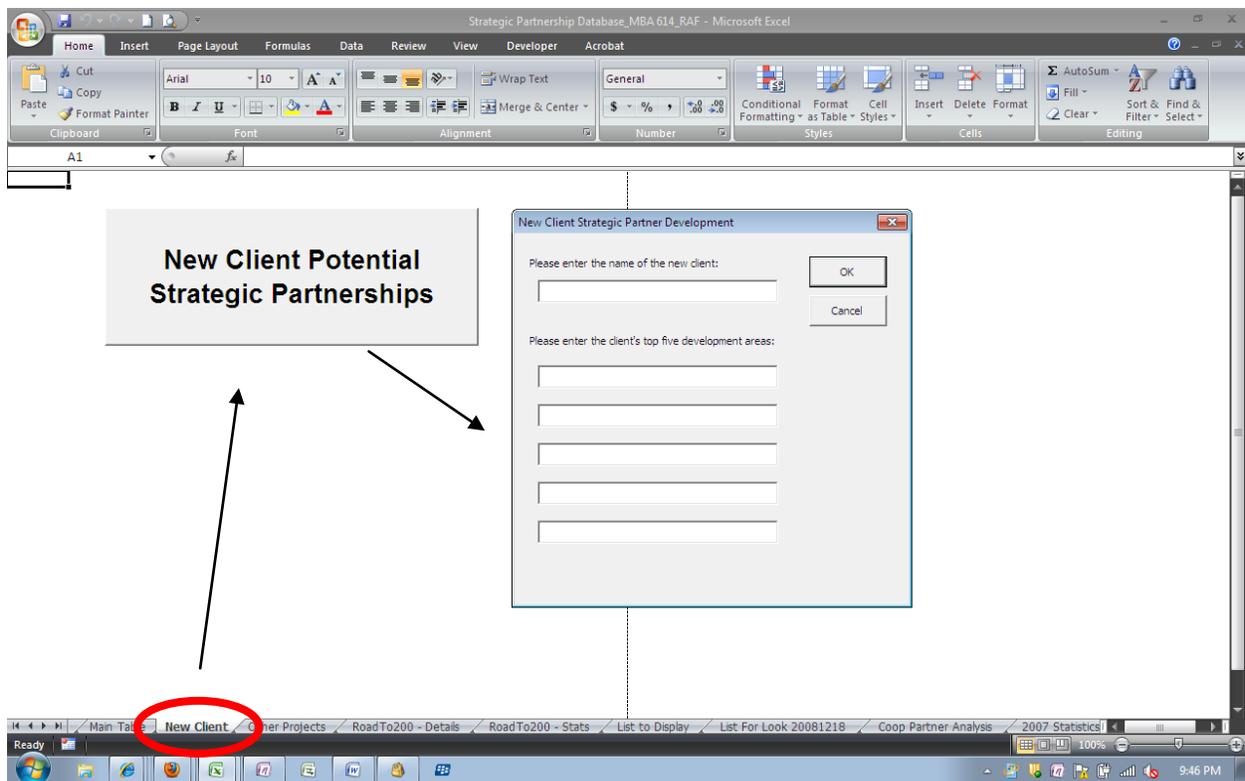
I went through four different white board iterations of how I wanted this program to work and look. Designing a functional user form and new worksheet were paramount. I wanted to consolidate the potential user forms into one – this led to some heavy code (discussed later). It was also important to have a professional spreadsheet produced as I would be forwarding my automated results over to the Business Development team. The whiteboard phase was valuable as I am not the best in terms of code production and I wanted to be sure about the fit and form before starting the process.

Step 2:

Designing the template went smoothly. I used the record macro feature for some of the formatting efforts, but for populating the data I used 15 loops (For, Next). This was vetted later as I called the data using the user form and had it populate the new spreadsheet after pressing “OK”.

Step 3:

I worked on the user form next. I created a button that resided on a “New Client” worksheet that would call the user form. See below:



The user form was difficult given that I was pulling data from a large and complicated spreadsheet and needed multiple lines of information. An example of what I must look at (with hundreds of lines and multiple worksheets):

Ownership	Category	Stage	Priority	Name	Technology Type	Strat Alliances	Status (1 to 5)
OHTR Ownership							
(Potential EO Leads)	New Partner Pipeline	J - No Contact	III - Reactive Management	Aldigitalnet	eCommerce Platform	Channel	U
Channel Sales	New Partner Pipeline	J - No Contact	III - Reactive Management	Conversion Multiplier	eCommerce Platform	Channel	U
Client	New Partner Pipeline	J - No Contact	III - Reactive Management	Ecetera	eCommerce Platform	Channel	U
Channel Sales	New Partner Pipeline	J - No Contact	III - Reactive Management	HDI by VSI	eCommerce Platform	Channel	U
Name	Technology	Status	III - Reactive Management	Yadicia	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	E - Accreditation Queue	I - Focused Management	Business Objects	Business Intelligence	Aaron Vatson	U
Strategic Alliances	New Partner Pipeline	A - Need to Contact	III - Reactive Management	Autonomy	Site Search / Information Access	Tim Hong	U
Channel Sales	Partner Maintenance	E - Accreditation Queue	III - Reactive Management	Sapient (Budgettrack)	Display Advertising / Ad Serving	David Humphreys	U
Channel Sales	Partner Maintenance	E - Accreditation Queue	III - Reactive Management	Sapient (Budgettrack)	OTF	David Humphreys	U
Channel Sales	Partner Maintenance	F - Accreditation In Progress	III - Reactive Management	Coradiant	Performance Management	David Humphreys	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	I - Focused Management	Move Networks, Inc.	Rich Media / Streaming Video	Channel	U
Strategic Alliances	New Partner Pipeline	B - Contact Made	I - Focused Management	BuzzMetrics	Social Media	Tim Hong	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Acumium LLC	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Amazon Enterprise Solutions	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	ChannelNet	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Clickability	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Corsis Technology Group	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	DemandWare	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Devis	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	DMiSite	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	eCommerce Partners	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Elastic Path Software Inc.	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Engmedia	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	EZ Rez Software	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Fig, Inc.	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	GSI Commerce	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Hibis GmbH	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Juice Media LLC	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Lagarde	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Landscape Marketing DBA Dministe	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Macrovion Corporation	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	MarketBright	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Marketive	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	McClatchy Interactive	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Media99 LLC	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Mezine	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Noticils	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Navitate Inc	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Novator	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Point & Shop	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Prosodie Interactive California	eCommerce Platform	Channel	U
Channel Sales	Partner Maintenance	G - Accreditation Complete	III - Reactive Management	Rainmaker	eCommerce Platform	Channel	U

The data is actually organized pretty well, but it takes forever to sort through the partner options. The user form, as filled out appears like this to the party looking for data:

New Client Strategic Partner Development

Please enter the name of the new client:

Home Depot

OK

Cancel

Please enter the client's top five development areas:

Email Marketing

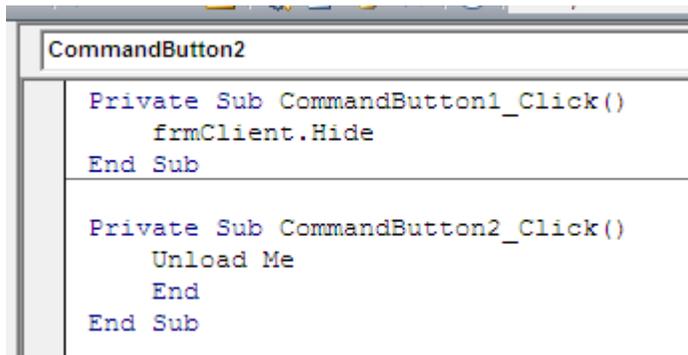
SEO

CMS

Mobile

Performance Management

You will note that the form asks for specific development areas. These are the realms of technology that our strategic partners specialize in. These inputs need to match those listed on the database exactly – there is not “matching” characteristic (auto-correct), although that might be a great future endeavor or add-in to this program. I also labored for over 5 hours trying to figure out how to incorporate drop downs on the user form that feature the 10 or 12 most common development areas...what a frustrating effort. More on that in the “Learning Points” section. By the way, an achievement I am very proud of...all of the buttons on the user form work...including the “cancel” key! I had to go through several homework’s and class examples to find a good way to make sure everything worked. A clip of code for that:



```
CommandButton2

Private Sub CommandButton1_Click()
    frmClient.Hide
End Sub

Private Sub CommandButton2_Click()
    Unload Me
End
End Sub
```

Below is some of the code I implemented in order to pull and search new data from the database:

```
' Getting new client data via a userform
Load frmClient
frmClient.Show
clientName = frmClient.txtClient
devArea1 = frmClient.txtDevArea1
devArea2 = frmClient.txtDevArea2
devArea3 = frmClient.txtDevArea3
devArea4 = frmClient.txtDevArea4
devArea5 = frmClient.txtDevArea5
Unload frmClient

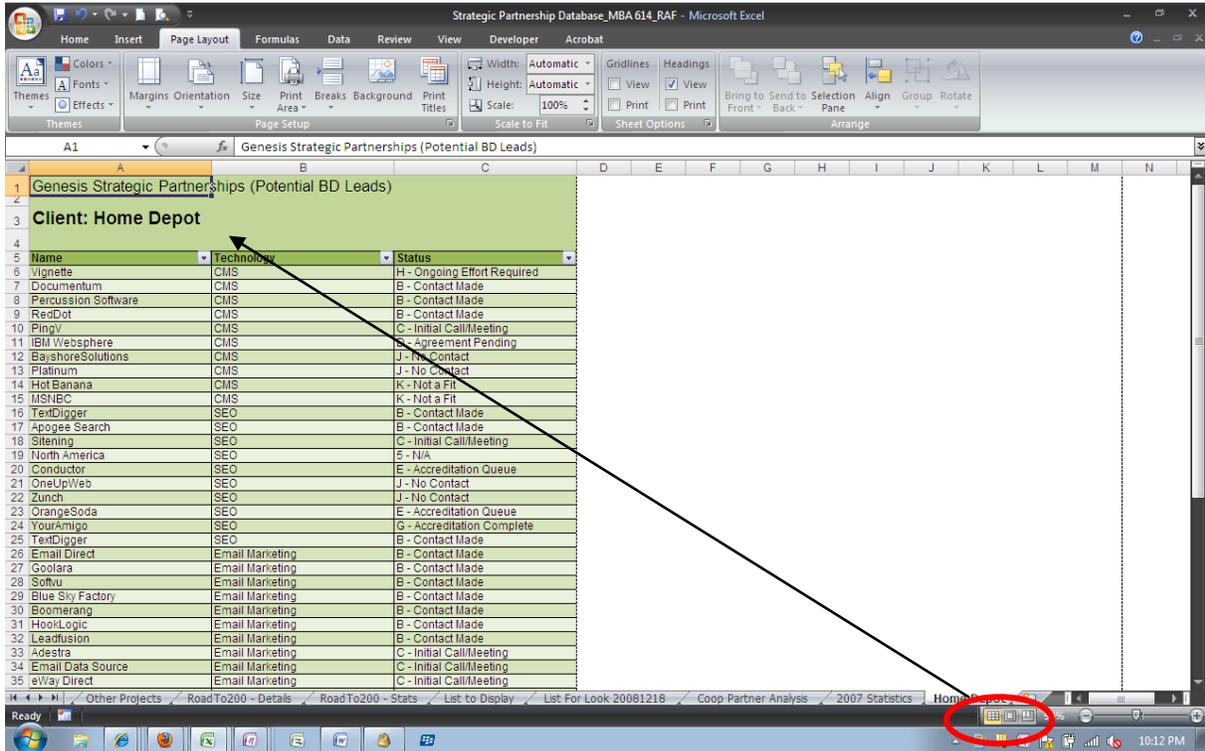
Application.ScreenUpdating = False

' Searching the Main Table worksheet for the top ten
' partners for each of the five development areas.
Sheets("Main Table").Select

' Loop for first development area
Range("A1").Select
For i = 0 To 9
    Cells.Find(What:=devArea1, After:=ActiveCell, LookIn:=xlFormulas, _
        LookAt:=xlPart, SearchOrder:=xlByRows, SearchDirection:=xlNext, _
        MatchCase:=False, SearchFormat:=False).Activate
    partnerList1(i) = ActiveCell.Offset(0, -1).Range("A1").Value
    statusList1(i) = ActiveCell.Offset(0, -3).Range("a1").Value
Next
```

Step 4:

My next major effort was making sure that a new worksheet formed (with the correct Client label) and populated correctly. As you can see below, I was indeed successful in creating such a masterpiece...but only after many hours of trial, error, and broken code.



A close up of the deliverable:

Genesis Strategic Partnerships (Potential BD Leads)		
Client: Home Depot		
Name	Technology	Status
Vignette	CMS	H - Ongoing Effort Required
Documentum	CMS	B - Contact Made
Percussion Software	CMS	B - Contact Made
RedDot	CMS	B - Contact Made
PingV	CMS	C - Initial Call/Meeting
IBM Websphere	CMS	D - Agreement Pending
BayshoreSolutions	CMS	J - No Contact
Platinum	CMS	J - No Contact
Hot Banana	CMS	K - Not a Fit
MSNBC	CMS	K - Not a Fit
TextDigger	SEO	B - Contact Made
Apogee Search	SEO	B - Contact Made
Sitening	SEO	C - Initial Call/Meeting
North America	SEO	5 - N/A
Conductor	SEO	E - Accreditation Queue
OneUpWeb	SEO	J - No Contact
Zunch	SEO	J - No Contact
OrangeSoda	SEO	E - Accreditation Queue
YourAmigo	SEO	G - Accreditation Complete
TextDigger	SEO	B - Contact Made
Email Direct	Email Marketing	B - Contact Made
Goolara	Email Marketing	B - Contact Made
Softvu	Email Marketing	B - Contact Made
Blue Sky Factory	Email Marketing	B - Contact Made
Boomerang	Email Marketing	B - Contact Made
HookLogic	Email Marketing	B - Contact Made

Some of the final iterations of code for the effort include the following:

```
' Creating a new client worksheet and populating it
' with the data.
Sheets.Add After:=Sheets(Sheets.Count)
ActiveSheet.Select
ActiveSheet.Name = clientName
ActiveCell.FormulaR1C1 = "Genesis Strategic Partnerships"
With ActiveCell.Characters(Start:=1, Length:=30).Font
    .Name = "Arial"
    .FontStyle = "Regular"
    .Size = 10
    .Strikethrough = False
    .Superscript = False
    .Subscript = False
    .OutlineFont = False
    .Shadow = False
    .Underline = xlUnderlineStyleNone
    .ColorIndex = xlAutomatic
    .TintAndShade = 0
    .ThemeFont = xlThemeFontNone
End With
```

Step 5:

Sing hallelujah...and create some serious value for Home Depot (and other enterprise clients)!

Learning Points & Conceptual Difficulties & Final Thoughts

As mentioned before, I struggled with figuring out a filter-like drop-down option on the user form for the development areas. I looked through our recent class exercises and the text, but was unable to find anything that would make it all the way through. Though it felt like a waste of 5 hours, I stuck with it and that is what I am most proud of.

I spent much more time on this than many others would have required. I am fairly convinced that an above average VBA user would have done it in half the time it took me. I believe that it felt different creating something that I will actually use regularly (at least weekly) in my job. I feel that this distinction made me more deliberate and purposeful, with the long-term benefit in mind. I know that there will be things that I can add and improve with the code (I WILL figure out that drop down method!), but for now, it has served to elevate my standing after just two weeks on the job!

In the end, you will see that there are over 400 lines of code and a successful, working outcome. I actually did not think I was capable of such a product; however, I am a proud owner of an automated process that works and works well!