Phil Williams

Final Project

Executive Summary

Every year at company which I will title *Smart Solutions* (to keep their financials confidential), the company has to go through a long, drawn-out process to produce the Annual Operating Plan (AOP). This consists of all revenue and expense projections from which the company will be held accountable.

The process requires that every department head submit their projected budget for the upcoming year. Up to this point, there hasn't been a formalized spreadsheet where the department heads could submit their projected heads. Instead, they have been given a blank Income Statement and have been tasked to complete the Income Statement for their respective department.

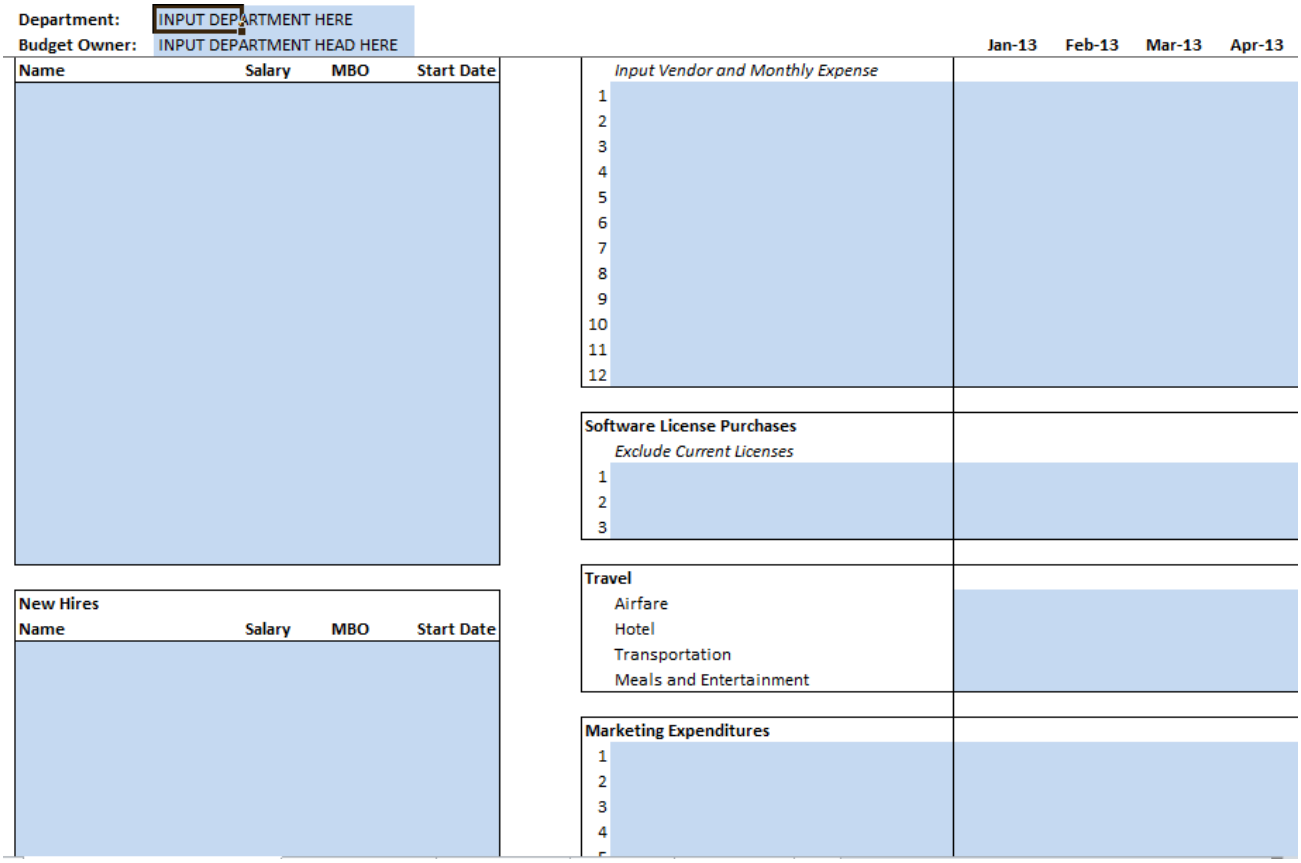
Given the complexity of an Income Statement, there has been much confusion over the past few years during this annual planning cycle. Department heads have been hoping for a simpler solution to complete this annual process.

The solution to the problem is the project submission. Instead of having to convert all of their expenses into an income statement, the template instead allows department heads to easily input relative expenses in categories. The layout is easily understood allowing managers with little to no experience to effectively budget for their upcoming year.

After department heads input their relative budgets, they can then select a button in the ribbon which will automatically calculate their Income Statement. After doing so, the managers can then click another button which will download historical journal entries from an external spreadsheet, calculate a historical Income Statement, and then allow the department heads to compare next year's budget with the current year's actual expenses.

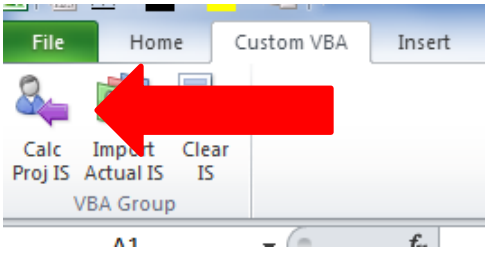
Implementation

To begin, I had to build an easy to use interface for department managers to input their respective budgets. I wanted to make it intuitive and easy to use so that managers with little to no financial statement experience could still complete their budget without assistance from the finance team.



Department:	INPUT DEPARTMENT HERE							
Budget Owner:	INPUT DEPARTMENT HEAD HERE							
Name	Salary	MBO	Start Date		Input Vendor and Monthly Expense	Jan-13	Feb-13	Mar-13	Apr-13
				1					
				2					
				3					
				4					
				5					
				6					
				7					
				8					
				9					
				10					
				11					
				12					
					Software License Purchases				
					Exclude Current Licenses				
				1					
				2					
				3					
					Travel				
					Airfare				
					Hotel				
					Transportation				
					Meals and Entertainment				
					Marketing Expenditures				
				1					
				2					
				3					
				4					
New Hires									
Name	Salary	MBO	Start Date						

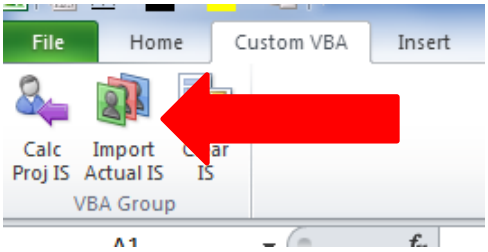
After completing the form spreadsheet, there is a button that managers can click to automatically calculate their respective Income Statement



After clicking this button, a year-long income statement will be automatically produced

Department									
In actual dollars	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13
Salaries and Wages									
Payroll Taxes									
Benefits									
Legal and Accounting Expenses									
Marketing and Public Relations									
Outside Services									
Telecommunications									
Travel									
Total Operating Expenses									
Change from 2012									

In order to give managers perspective, to ensure their estimates are in the right ball park, there is a button that managers can click that will connect to an external database, pull down tens of thousands of journal entries, and will calculate the current year's actual Income Statement.



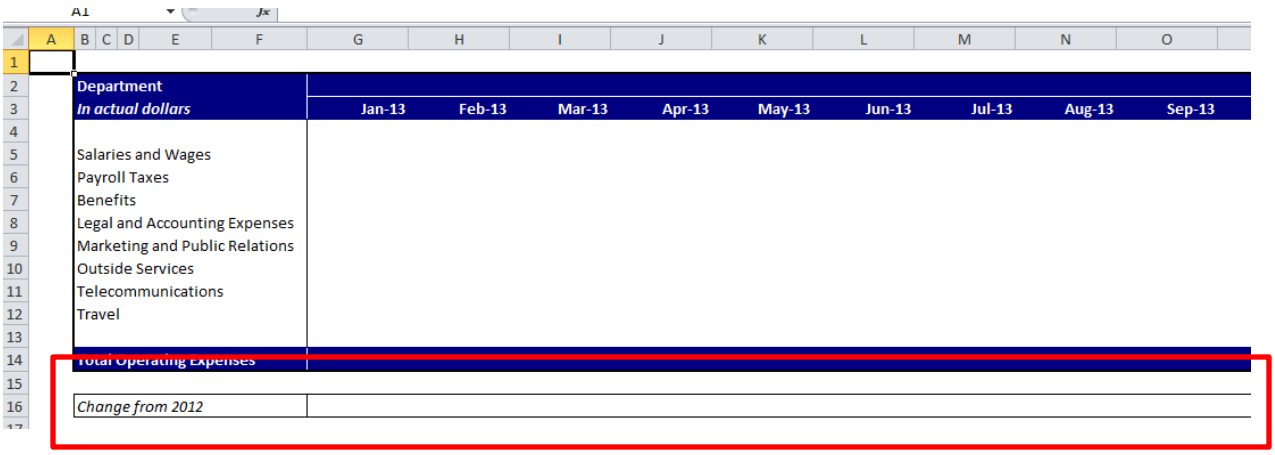
Data pulled in

Account	Type	Date	Num	Name	Departm	De	Cre		Categ
10100 - Cash Opera	Transfer	1/7/2010			- No Departr	$0.00	$1,646,005.89	($1,646,005.89)	Cash
10100 - Cash Opera	Transfer	1/7/2010			- No Departr	$1,644,880.89	$0.00	$1,644,880.89	Cash
10100 - Cash Opera	Bill Payment	1/7/2010	3946	National Ben	- No Departr	$0.00	$905.90	($905.90)	Cash
10100 - Cash Opera	Bill Payment	1/7/2010	3948	Rappahannc	- No Departr	$0.00	$1,726.38	($1,726.38)	Cash
10100 - Cash Opera	Bill Payment	1/7/2010	3949	UMB	- No Departr	$0.00	$755.83	($755.83)	Cash
10100 - Cash Opera	Bill Payment	1/7/2010	3947	Datwyler Jo	- No Departr	$0.00	$19,492.21	($19,492.21)	Cash
10100 - Cash Opera	Bill Payment	1/7/2010	3950	Cihan Bozku	- No Departr	$0.00	$912.00	($912.00)	Cash
10100 - Cash Opera	Transfer	1/8/2010			- No Departr	$0.00	$1,636,699.60	($1,636,699.60)	Cash
10100 - Cash Opera	Transfer	1/8/2010			- No Departr	$1,646,005.89	$0.00	$1,646,005.89	Cash
10100 - Cash Opera	Deposit	1/8/2010			- No Departr	$37,830.00	$0.00	$37,830.00	Cash
10100 - Cash Opera	Check	1/8/2010	ACH 01.08.1	Humana	- No Departr	$0.00	$9,000.00	($9,000.00)	Cash
10100 - Cash Opera	Transfer	1/11/2010			- No Departr	$0.00	$1,645,018.89	($1,645,018.89)	Cash
10100 - Cash Opera	Transfer	1/11/2010			- No Departr	$1,636,699.60	$0.00	$1,636,699.60	Cash
10100 - Cash Opera	Deposit	1/11/2010			- No Departr	$63,930.00	$0.00	$63,930.00	Cash
10100 - Cash Opera	Check	1/11/2010	ACH 01.11.1	Fidelity Inves	- No Departr	$0.00	$8,224.80	($8,224.80)	Cash
10100 - Cash Opera	Check	1/11/2010	ACH 01.11.1	Fidelity Inves	- No Departr	$0.00	$3,350.91	($3,350.91)	Cash
10100 - Cash Opera	Transfer	1/12/2010			- No Departr	$0.00	$1,689,226.68	($1,689,226.68)	Cash
10100 - Cash Opera	Transfer	1/12/2010			- No Departr	$1,645,018.89	$0.00	$1,645,018.89	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$1,587.50	$0.00	$1,587.50	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$1,215.50	$0.00	$1,215.50	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$352.00	$0.00	$352.00	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$852.50	$0.00	$852.50	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$2,812.00	$0.00	$2,812.00	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$1,636.00	$0.00	$1,636.00	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$2,225.00	$0.00	$2,225.00	Cash
10100 - Cash Opera	Payment	1/12/2010		2489 UNI-C	- No Departr	$1,440.50	$0.00	$1,440.50	Cash
10100 - Cash Opera	Transfer	1/13/2010			- No Departr	$0.00	$1,717,229.35	($1,717,229.35)	Cash
10100 - Cash Opera	Transfer	1/13/2010			- No Departr	$1,689,226.68	$0.00	$1,689,226.68	Cash

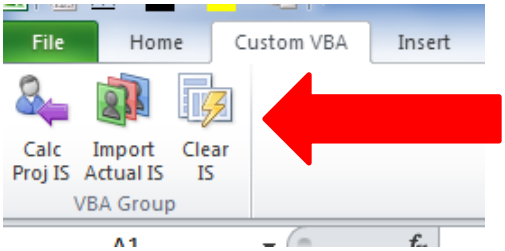
Data calculated

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
COST OF GOODS SOLD						
Direct Salary	-	-	-	-	-	-
Website Expenses	-	-	-	-	-	-
Printing and Reproduction	-	-	-	-	-	-
Hosting	-	-	-	-	-	-
IVR Hosting	-	-	-	-	-	-
Translation	-	-	-	-	-	-
Security	-	-	-	-	-	-
Reseller Fees	-	-	-	-	-	-
Outside Services	-	-	-	-	-	-
Direct Software	-	-	-	-	-	-
Occupancy Expenses	-	-	-	-	-	-
Travel	-	-	-	-	-	-
Other	-	-	-	-	-	-
TOTAL COST OF GOODS SOLD	$0	$0	$0	$0	$0	$0
SALARIES, TAXES, & BENEFITS						
Salaries	-	-	-	-	-	-
Commissions	-	-	-	-	-	-
Bonus	-	-	-	-	-	-
Payroll Tax	-	-	-	-	-	-
401k Match	-	-	-	-	-	-
Dental Insurance	-	-	-	-	-	-

Data brought into Proj. IS for comparative purposes:



Lastly, the changes can be cleared to ready the spreadsheet for another department head.



Here are a few screenshots when the documents are filled out and then the buttons are clicked:

Department Estimates

Department:	R&D										
Budget Owner:	INPUT DEPARTMENT HEAD HERE										
							Jan-13	**Feb-13**	**Mar-13**	**Apr-13**	**May-13**	**Jun-13**
Current R&D Employees												
Name		**Salary**	**MBO**	**Start Date**								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
Tom		$ 50,000		6/1/2011								
		$ 48,500										
Outside Vendor Contracts												
	Input Vendor and Monthly Expense											
	1 Test						$11	$3,000	$342	$3,000	$3,000	$123
	2 Test						$2,000	$243	$2,000	$123	$2,000	$123
	3 Test						$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
	4											
	5											
	6											
	7											
	8											
	9											
	10											
	11											
	12											
Software License Purchases												
	Exclude Current Licenses											
	1 Test						$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
	2											
	3											
New Hires												
Name		**Salary**	**MBO**	**Start Date**								
Greg		$ 32,000		1/1/2013								
Greg		$ 32,000		2/1/2013								
Travel												
	Airfare						$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
	Hotel						$500	$500	$500	$500	$500	$500
	Transportation						$200	$200	$200	$200	$200	$200
	Meals and Entertainment						$100	$100	$100	$100	$100	$100

After Calc Proj. IS Clicked

R&D							
In actual dollars	**Jan-13**	**Feb-13**	**Mar-13**	**Apr-13**	**May-13**	**Jun-13**	**Jul-13**
Salaries and Wages	$ 41,667	$ 44,333	$ 47,000	$ 49,667	$ 52,333	$ 55,000	$ 57,667
Payroll Taxes	$ 2,917	$ 3,103	$ 3,290	$ 3,477	$ 3,663	$ 3,850	$ 4,037
Benefits	$ 3,333	$ 3,547	$ 3,760	$ 3,973	$ 4,187	$ 4,400	$ 4,613
Legal and Accounting Expenses	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100
Marketing and Public Relations	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Outside Services	$ 3,011	$ 4,243	$ 3,342	$ 4,123	$ 6,000	$ 1,246	$ 6,000
Telecommunications							
Travel	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800
Total Operating Expenses	**$ 53,828**	**$ 58,126**	**$ 60,292**	**$ 64,140**	**$ 69,083**	**$ 67,396**	**$ 75,217**
Change from 2012	$ 53,828	$ 58,126	$ 60,292	$ 64,140	$ 69,083	$ 67,396	$ 75,217

After Import Clicked

R&D *In actual dollars*	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13
Salaries and Wages	$ 41,667	$ 44,333	$ 47,000	$ 49,667	$ 52,333	$ 55,000	$ 57,667
Payroll Taxes	$ 2,917	$ 3,103	$ 3,290	$ 3,477	$ 3,663	$ 3,850	$ 4,037
Benefits	$ 3,333	$ 3,547	$ 3,760	$ 3,973	$ 4,187	$ 4,400	$ 4,613
Legal and Accounting Expenses	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100
Marketing and Public Relations	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Outside Services	$ 3,011	$ 4,243	$ 3,342	$ 4,123	$ 6,000	$ 1,246	$ 6,000
Telecommunications							
Travel	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800	$ 1,800
Total Operating Expenses	**$ 53,828**	**$ 58,126**	**$ 60,292**	**$ 64,140**	**$ 69,083**	**$ 67,396**	**$ 75,217**
Change from 2012	$ (246,828)	$ (226,575)	$ (238,501)	$ (238,005)	$ (225,712)	$ (227,575)	$ (206,508)

Discussions of Learning

I used a variety of the elements that I have learned during the semester in order to successfully complete this project. First and foremost, I learned how to connect to an external database/spreadsheet. I had to pull journal entries form a database that is in constant flux. Entries are added on an almost daily basis adding an element of complexity.

I also had to decipher how to input formulas to calculate a tab from data on in a separate location. This required quite a bit of code writing given the 96 cells which required input.

Additionally, I had to deal with automatic alerts and errors when running my code which had to be disabled then re-enabled.

Lastly, I also spent a large portion of time building the infrastructure for the spreadsheet to make it aesthetically appealing for the end business user.

Assistance

I received no outside assistance on my project. I wrote all of the code myself. Additionally, I received no internet assistance.