Compliance Report Formatting and Creation

Hannah Rios – IS 520

Executive Summary

In the Purchasing & Travel Department at BYU, each month a report is run to find issues that are reported on a monthly "Compliance Report" to controllers of the department on campus. The purpose of the report is to make sure employees are reporting and documenting the use of university resources in a correct and timely manner.

Five reports are run through Y-Expense, formatted to keep only the information needed, and then compiled to create the Compliance Report. These reports are Unattached Card Transactions, Unattached Cash Advances, and Open Purchasing, Travel and Visitor Expense reports.

 My boss who compiles these reports usually takes a whole day to complete the task. He runs each report, filters and formats the information to leave the correct data, deletes duplicates, pulls information in to match operating units to department controllers, then sends each controller whose department is included on the report a copy. My project streamlines this process to make the task one that can be completed with a few clicks instead of hours of tedious work.

## Implementation Documentation

Formatting of Reports

Each of the five reports mentioned are run in YExpense, a BYU website, then pasted into this workbook on their corresponding worksheets to be formatted. I structured it this was because the location where these reports are stored could potentially change and I didn't want that to make the program unusable. Another report which must be run and inserted into the workbook is an Approver list for BYU departments.

Because each of the reports used in the compliance report have different characteristics (different numbers of columns, different formats, etc.) I have created separate macros to format each. Within each sheet's macro, however, there are some shared macros that are called.

The picture below shows the ribbon I added to format the compliance report. The five buttons on the left are the individual buttons for formatting each individual report.
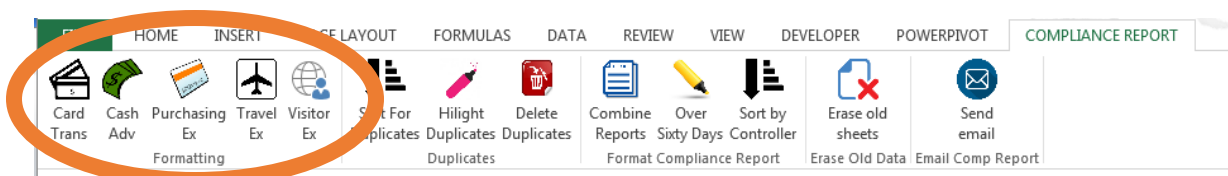
When each button is hit to format one of the five reports, the macro first checks that the formatting process has not already been completed by checking for a heading that will be inserted in the formatting process. If it has
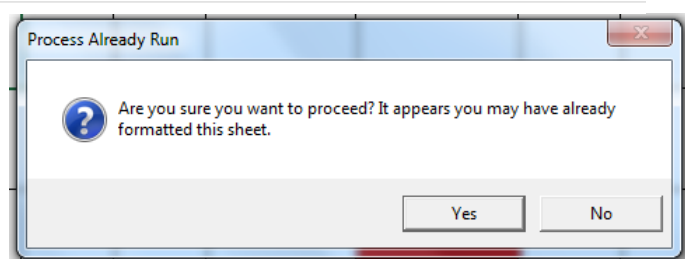
already been completed, a message box will pop up to warn the user that it appears formatting has already been completed and asks if they want to continue. If they press no, the macro will be exited.

Card Trans When this button is pressed, the macro will navigate to the **Unattached Card Transactions** report (which usually has around 4000+ lines of data) and will:

- Delete lines that are marked as disputed charges
- Delete columns we do not need for our report (11 columns are deleted)
- Rearrange columns to match the formatting of the compliance report
- Insert row headings not already included
- Format the newly inserted row headings
- Sort the report based on date
- Delete rows that are not over 30 days old
- Place a label of "Unattached Credit Card Charge" in the first column of each line
- Insert a vlookup formula into the last two columns to find the department and controller based on the operating unit of the transaction

POST_DA TE	STATUS_DA TE	CARD_NUM BER	CARD_TYPE	CARD_HOLDER	MERCHANT	CITY	STATE	COUNTRY	USD_AMOUNT	FOREIGN_AMOUNT	REFERENCE	EMPLOYEE	NET_ID	TX_OPER_U NIT	CARD/ USER		
						Unattached Card Transactions for All Departments											
12/2/2015	12/2/2015	0002	Department	Saoirse	Merchant 885	Oregon	UT	USA	$73.00	73	21242	Capri	sdc16		716633	6100	00000
12/1/2015	12/1/2015	0003	Campus Dept Card	Catherine	Merchant 333	Baton Rouge	UT		$54.00	54	33172	Noah	bjx36		445363	6100	00000
12/1/2015	12/1/2015	0003	Campus Dept Card	Catherine	Merchant 334	Baton Rouge	UT		$86.00	86	26221	Noah	bjx36		445363	6100	00000
12/1/2015	12/1/2015	0003	Campus Dept Card	Catherine	Merchant 333	Baton Rouge	UT		$11.00	11	47732	Noah	bjx36		445363	6100	00000
11/30/2015	11/30/2015	0003	Campus Dept Card	Catherine	Merchant 333	Baton Rouge	UT		$74.00	74	52218	Noah	bjx36		445363	6100	00000
12/2/2015	12/2/2015	0008	Campus Dept Card	Étienne	Merchant 336	Baton Rouge	UT		$29.00	29	41787	Roux	wix00		470320	6100	00000
12/2/2015	12/2/2015	0008	Campus Dept Card	Étienne	Merchant 336	Baton Rouge	UT		$55.00	55	52711	Roux	wix00		470320	6100	00000
12/2/2015	12/2/2015	0008	Campus Dept Card	Étienne	Merchant 334	Baton Rouge	UT		$54.00	54	23932	Roux	wix00		470320	6100	00000
12/2/2015	12/2/2015	0009	Campus Dept Card	Allegra	Merchant 329	Baton Rouge	UT		$89.00	89	31268	Roux	wix00		470320	6100	00000
11/16/2015	11/16/2015	0009	Campus Dept Card	Allegra	Merchant 710	Baton Rouge	UT		$37.00	37	88620	Roux	wix00		470320	6100	00000
12/2/2015	12/2/2015	0010	Campus Dept Card	Nora	Merchant 710	Baton Rouge	UT		$41.00	41	15131	Ezekiel	lrp86		737264	6100	00000
11/16/2015	12/14/2015	0012	Travel	Ariella	Merchant 1923	Wrangell	UN	GBR	$46.00	46	71433	Conan	cvg02	150687	645783	0	00000
11/27/2015	11/27/2015	0013	Corporate	Lilo	Merchant 77	Fayetteville	CA	USA	$58.00	58	28566	Llewellyn	coc15		277602	643	00000
11/23/2015	11/23/2015	0013	Corporate	Lilo	Merchant 362	Tappan	UT	USA	$48.00	48	10851	Llewellyn	coc15		277602	643	00000
11/20/2015	11/20/2015	0013	Corporate	Lilo	Merchant 50	Stephen	VA	USA	$87.00	87	30712	Llewellyn	coc15		277602	643	00000
11/23/2015	11/23/2015	0027	Department	Lionel	Merchant 95	Surprise	WA	USA	$88.00	88	26204	Cameron	vvf03		445618	6100	00000
12/1/2015	12/1/2015	0040	Campus Dept Card	Lucretia	Merchant 319	Baton Rouge	UT		$66.00	66	81383	Thais	mbf56		429026	6100	00000
11/13/2015	11/13/2015	0051	Corporate	Lars	Merchant 743	California City	CA	USA	$21.00	21	55757	Vayne	hvm27		613127	6100	00000
12/1/2015	12/1/2015	0065	Department	Brantley	Merchant 1462	Tappan	UT	USA	$85.00	85	64467	Hayes	tqg68		522944	6100	00000
12/1/2015	12/1/2015	0066	Corporate	Gabriela	Merchant 1331	Macdoel	UT	USA	$33.00	33	69320	Allegra	oct96		288140	6100	00000
11/30/2015	11/30/2015	0066	Corporate	Gabriela	Merchant 1692	Leigh	TX	USA	$34.00	34	42833	Allegra	oct96		288140	6100	00000
11/27/2015	11/27/2015	0066	Corporate	Gabriela	Merchant 1692	Leigh	TX	USA	$55.00	55	61155	Allegra	oct96		288140	6100	00000
12/2/2015	12/2/2015	0068	Department	Natalie	Merchant 1673	Reda Sląska	MN	USA	$19.00	19	28624	Augusta	sli19		160721	6100	00000
12/2/2015	12/2/2015	0068	Department	Natalie	Merchant 779	San Francisco	IL	USA	$45.00	45	76559	Augusta	sli19		160721	6100	00000
12/1/2015	12/1/2015	0068	Department	Natalie	Merchant 1673	Reda Sląska	MN	USA	$78.00	78	63471	Augusta	sli19		160721	6100	00000
12/2/2015	12/2/2015	0074	Corporate	Adler	Merchant 582	Kafstein	MN	USA	$31.00	31	33169	Marius	byz13		364577	6100	00000
12/2/2015	12/2/2015	0074	Corporate	Adler	Merchant 1316	Preston	CA	USA	$71.00	71	54637	Marius	byz13		364577	6100	00000

Report before (~4100 lines)

Type	STATUS_DATE	EMPLOYEE	NET_ID	MERCHANT	CITY	USD_AMOUNT	REFERENCE	CARD/USER_ACCOUNT	Notes	Department	Controller
Unattached Credit Card Charge	3/1/2015	Nora	ycy29	Merchant 1739	Leamington	$34.00	68355	807774		Dept 533	Teo
Unattached Credit Card Charge	3/30/2015	Marius	qjf79	Merchant 1522	Baton Rouge	$5.00	39362	266080		Dept 118	Eva
Unattached Credit Card Charge	10/1/2015	Marius	qjf79	Merchant 1522	Baton Rouge	$51.00	43526	266080		Dept 118	Eva
Unattached Credit Card Charge	10/2/2015	Marius	qjf79	Merchant 1522	Baton Rouge	$36.00	45320	266080		Dept 118	Eva
Unattached Credit Card Charge	10/2/2015	Marius	qjf79	Merchant 1522	Baton Rouge	$85.00	31378	266080		Dept 118	Eva
Unattached Credit Card Charge	10/2/2015	Flynn	ika50	Merchant 61	Klagenfurt am Wörthersee	$67.00	73901	782332		Dept 503	Pax
Unattached Credit Card Charge	10/8/2015	Vega	hij55	Merchant 33	Lodoga	$25.00	10459	445363		Dept 264	Ruth
Unattached Credit Card Charge	10/13/2015	Perseus	gwo15	Merchant 531	Klagenfurt am Wörthersee	$84.00	36686	547119		Dept 351	Gregory

Report After (~300 lines)

Cash Adv For this button, the **Unattached Cash Advance** report (usually around 25 lines) will be selected and the macro will:

- Complete the same tasks as for the Card Transactions, except there is no need to delete disputed lines, and the label inserted in the first column is "Unattached Cash Advance"

Purchasing Ex For this button, the **Purchasing Expense Reports** report (usually around 1600 lines) will be selected and the macro will:

- Complete the same tasks as for the Cash Advance report, plus the following unique processes:
- Compare the "open date" column to the "posted date" column and insert the open date in the posted date if posted date is empty (this means the expense report is a reimbursement. In all other cases we want to use the posted date, so we keep that column)
- Change dates to "dates" format, since for some reason this report comes in with the dates formatted incorrectly so they will not sort properly
- Change the format of the Operating Unit column to text so that the vlookup will work properly to find departments and controllers
- Put "Unapproved business expense" label in first column

Travel Ex For this button, the **Open Travel Expense Reports** report (usually around 250 lines) will be selected and the macro will:

- Complete the same tasks as for the Cash Advances, except the label inserted in the first column is "Unapproved Travel Expense"

Visitor Ex For this button, the **Open Visitor/Student Expense Reports** report (usually around 81 lines) will be selected and the macro will:

- Complete the same tasks as for the Cash Advances, except the label inserted in the first column is "Unapproved Visitor Expense"

Deleting Duplicate Lines
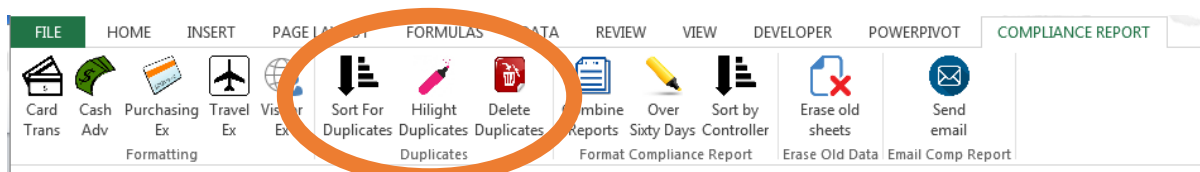
Sort for Duplicates Both the Purchasing and Travel Expense Reports contain multiple lines for one expense report, since multiple transactions can be put on one expense report. In order to trim down the data, the reports are sorted when the button is clicked by:

- the expense report number
- the date (oldest to newest) and
- the transaction amount

Hilight Duplicates The sorting leaves the oldest transaction on top. If there are multiple transactions on the same oldest date, the one with the highest dollar amount will be left on top. Clicking the button highlights each of the duplicate expense report lines, after the initial instance, in red. This allows the person preparing the report to look at the duplicates and make adjustments if lines with certain operating units should be kept rather than the line put on top by the sorter.

Delete Duplicates Clicking this button simply deletes all the duplicate instances of an expense report number (after the initial line).

Combining Reports to From the Compliance Report

These five reports that have been formatted will now be combined to form the compliance report for the month.
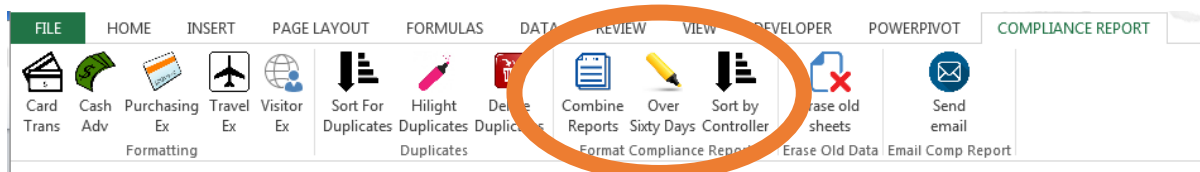

Combine Reports Clicking this button will select all of the data that has been formatted on each of the five sheets and paste it consecutively into the "Compliance Report" sheet. The macro simply goes down the line, starting with the Card Transactions, and pastes the data into the next open line from the top in the Compliance Report Sheet.

Over Sixty Days Transactions or Expense Reports that have not been properly approved/resolved within sixty days of their deadline are subject to a fine. For this reason, items that fit this category or highlighted to bring special attention to them. This macro simply finds transactions earlier than 60 days (going from the date the report is being run) and highlights them.

Sort by Controller The information is sent to the controllers for each department, so that they are aware when their employees have compliance issues. Clicking this button runs the macro to sort the report by the controller so that items from each department are all grouped together and all the issues within one controller's jurisdiction are easily seen at once.

Send Report in an Email
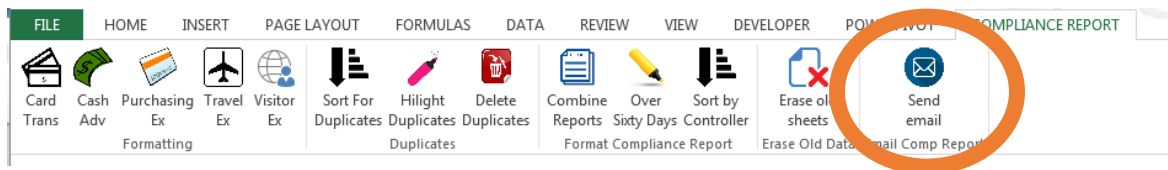
Send email Pressing this button will send the active sheet as an attachment in an email. Only the active sheet is sent. The macro is set up to work with Microsoft Outlook, and will automatically pull up a formatted email if the user is logged in to their Outlook account. The email has a pre-populated message

regarding the report and is addressed to be sent to the email address included in cell O2 of the Compliance Report Sheet.
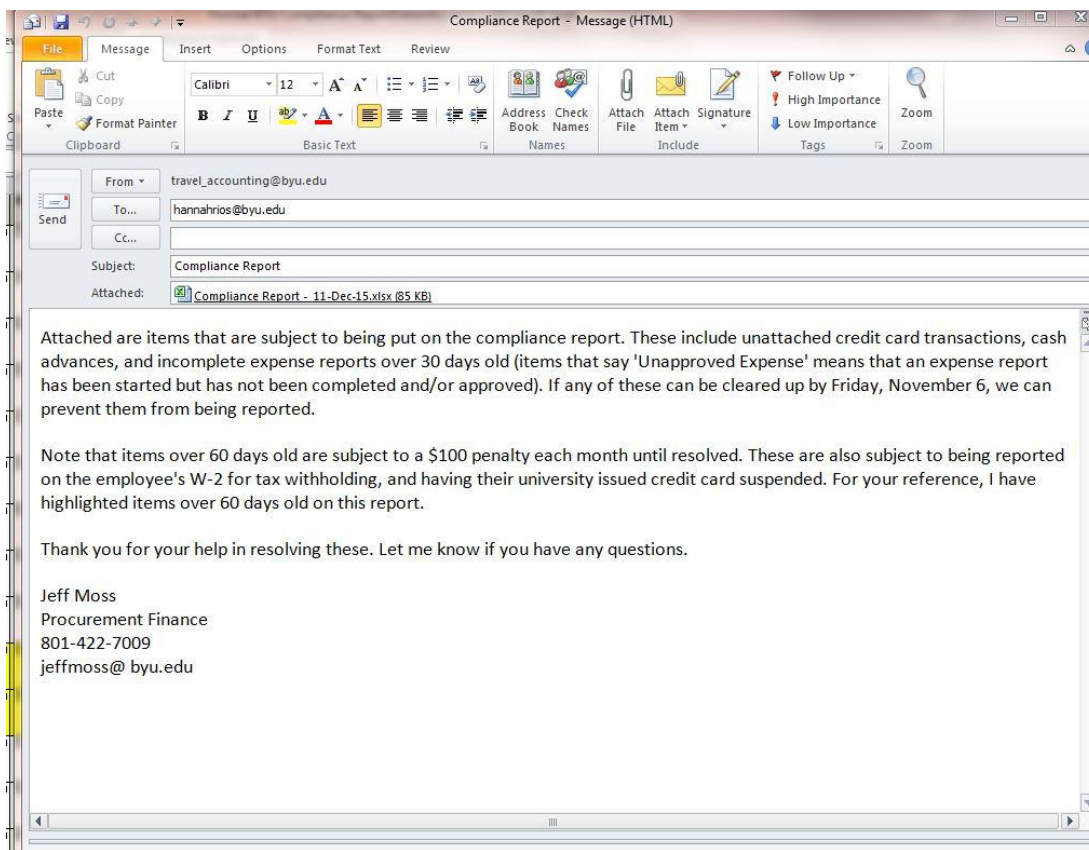
Erase Old Data to Reuse Workbook
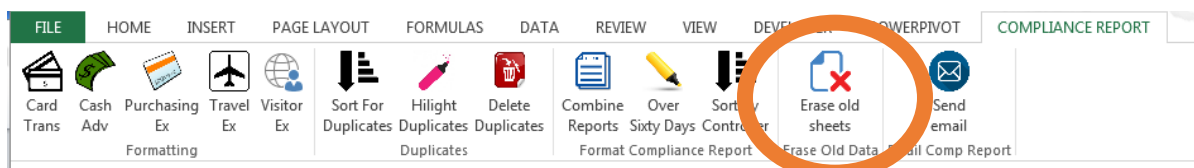
Erase Old Sheets When the workbook is reopened to create a report the next month, this button can be pressed to easily delete old reports to make room for the current information. Pressing the Erase Old Sheets button brings up a UserForm which allows for the user to select which items to delete. This button could also be used if information needs to be deleted and reentered while doing the Compliance Report process. This is why I gave the option to only delete certain sheets, rather than deleting all information at once.
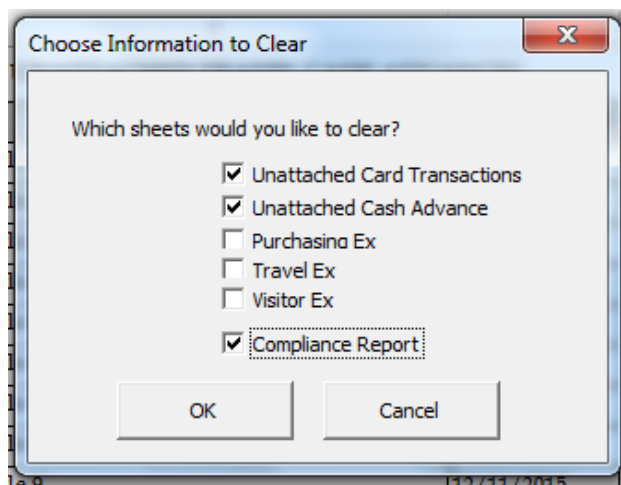
Discussion of Learning and Conceptual Difficulties Encountered

My biggest goal in creating this project was to have it be very user-friendly and also dynamic so that it would still function even though the data input is different every month. I want to be able to leave it with my department to use for years to come. I tried to split up macros as often as I could, rather than having all my code in one long macro so that if someone was trying to trouble-shoot it, they could simply take out the small process where the problem was occurring. It was harder to complete the project from the lens of what *could* be, rather than just writing it for the data I had.

One issue I had was simply that sometimes, as I added steps, they would interfere with my past code. Especially since each of the five reports have little quirks that differentiate them from the others, I had to do a lot of trouble-shooting to make sure that my code for one report was appropriate for the others.

Assistance

I utilized some VBA code that had been previously used in my department for a similar process. It mostly served as a spring-board for me, since it was fairly inefficient and very open to errors with changes. It based its code on the user-accessible names of worksheets, and always selected cells to deal with them, which I changed in order to speed up the processes. The main code I kept was simply the deleting of columns, which I had to adjust to fit the reports I was using, and the highlighting of duplicates, which I also adjusted to apply to one column always, instead of the column of the current cell. Another macro I utilized was to attach the Compliance Report to an email. I have a Macro to send reports to Financial Services, so I opened the macro and made adjustments to it to include my message and send it to the address input in the sheet. Other than that, I did not have any other assistance with my project.