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ISYS 520, Section 1

Independent Film Distribution Model

As part of a Management Consulting class at BYU I was assigned to work with a team on consulting for an independent film distributor. This particular distributor is currently innovating a new approach to marketing its films by hosting showings of its films at high schools across the country as part of a fundraising opportunity for the participating school. Each school keeps a 60% portion of the ticket proceeds and remits a 40% portion of the proceeds back to the distributor as a licensing fee for showing the film.

As part of our project, my consulting team has provided the company with an Excel workbook which contains a program for entering relevant information from each film showing across the country on the first tab of the book and then provides analytics of the information on the second tab depending on a combination of assumptions input by the users and check boxes dictating which assumptions to use or not to use when calculation relevant information. This second tab is designed to offer guidance in the decision of whether to release a particular film to DVD.

On the first sheet I have facilitated the entry of information for each showing by using a user form which indicates the relevant fields of information and provides an organized means of entering that information onto the spreadsheet. The user form is unique in that I have built in input controls which limit when information entered on the user form will appear on the spreadsheet. For example, if a necessary field is left out of the information recording process, a message box will appear, prompting the user to enter the relevant data.

As the message box appears with the relevant prompt, the program will clear any cells that have had information added to them as part of the current upload and retain that information in the user form. Once all the missing information has been entered, the user can again submit it for recording and all information that may have previously been deleted as part of the input control will be re-entered onto the form on the appropriate line, in the appropriate order. This ensures that no field is accidentally skipped and that the users will have all information necessary for the analytics portion of the program.

Once all the information for showings has been entered onto the first sheet through the user form, the user can move to the second sheet of the workbook to perform the desired analytics. This is the most important part of the program and required the greatest amount of time with VBA and the greatest complexity of code. There are different tables inserted on the second sheet which help facilitate data entry and organize the results of the analysis. To begin, the user is given the option of inputting specific assumptions or data not able to be tracked on the first sheet of the workbook.

This data that must be input includes the specific price to produce a DVD, expenses, etc. An important part of this program is the ability to determine what percent of people who view the film during the fundraising process will be interested in purchasing a DVD of the film. Once the button is pushed on the second sheet to perform the analytics a percentage is calculated of the number of viewers who indicated they would purchase the DVD versus the total number of viewers.

This number is calculated using a Do Loop and a step increment equal to the last occupied cell in the column totaling the number of people wanting a DVD plus one which provides for a summation of the total number of people wanting a DVD. This number is then divided into the total number of viewers and a rough estimate of the percentage of viewers eventually purchasing a DVD is produced. The problem with this approach is that the data may not reflect other information known by the company which may skew the results of this finding.

To alleviate this problem, I have implemented a check box next to a user input percentage estimate of people who will purchase the DVD. This check, when checked, indicates that the user would like to perform all calculations using the percentage number they have provided as compared to the number generated by my program. This happens using an If statement that is tied to a cell in a hidden column on the sheet which is occupied by "True" when the check box is checked, and "False" when it is left blank.

The accompanying If statement then uses the user input percentage or the program generated percentage based on the value present in the hidden cell. This additional functionality allows the user to make decisions using information they dictate and feel is most appropriate. Additional functionality is added to the program through the use of R1C1 formulas. These formulas dictate the appropriate calculations to be performed on the different pieces of information provided.

To add additional user functions, I have also included a button to print the results that are generated. This button will bring up the print preview screen for the analytics sheet automatically and allows the user to preview the sheet before it is printed. This preview will allow for any adjustments that need to be made. The user can then hit print from the preview screen and the sheet will automatically be sent to the default printer for that particular computer.

Although this particular project does not make use of information gathered from the internet as do many of the other projects for this class, I believe the difficulty and amount of coding done in VBA is comparable to most any other project that can be found on this blog. There are multiple user controls on the second tab, each with its own unique set of code dictating its functionality. The first tab contains a detailed user form and its accompanying input controls to allow for accurate and complete data entry within the program. There are also numerous smaller details that have been debugged throughout the program ranging anywhere from tab sequences within the user form to unique coding which provides the ability to clear contents of a row when the user form had been updated without complete information without losing information already entered and without altering the sequence of rows which are populated using the user form.

This project made great use of my VBA knowledge from this semester and allowed me to really learn and apply those principles we were taught in class. I spent numerous hours (approximately 20) coding and debugging this program and feel that it is an accurate assessment of my VBA knowledge, excluding drawing information from the internet, which simply was not practical or possible in this program. I hope that someone may find this program and its code useful at some later date.

The greatest problems and difficulties I faced while creating this program were issues dealing with user friendliness within the program. There are numerous changes that a user could make to this program by adding new information to the first tab for additional screenings or changing assumptions. The trick with VBA was learning how to prevent user errors or changes from affecting the integrity of the program. I had to learn how to program input controls that would limit the number of changes a user could make and would automate as much of the process as possible.

I feel like this was a great way for me to get hands-on experience to a real-life scenario in which I could use VBA to help contribute to a team or company in a way they otherwise would not be able to help themselves. It was an opportunity to bring everything I learned together and make a product which can be helped to improve processes or decisions for others in the future.