User Guide for Invoice System
Kettering Food and Nutrition Department

Project Description

The Kettering Food and Nutrition Department operates as an independent profit and loss organization within the school system. As a result, the leadership team maintains their own enterprise financial data including all sales and expenses. This data is maintained by a very small office staff through a series of complex spreadsheets.

The intent of this project was to automate and streamline the invoice data to simplify reporting. Automating invoice data improves performance and establishes a starting point for simplifying other financial reporting to include cost data for labor. Together these two parts would form an entire financial report for the profit loss of the organization that could be used to understand costs by school, supplier and month.

The solution that was implemented was a new data entry process and Pivot Table tool for the invoice data.

The tool was demonstrated to the program Director, Mary Lynne Bierman, Office Manager Beth Reedy, Andrews Intern Allison Benjaman and University of Cincinnati Intern Yale Godfrey on Sept 26t, and will be adopted for use starting October 1, 2024.

Pivot Table Concept

A pivot table is Tool that converts data in a spreadsheet into a data base, enabling it to be sorted, filtered, and manipulated in an interactive way, without having to manually create formulas.

By using a Pivot Table tool, large, complex data becomes simple to organize and manipulate. Data can be interactively reorganized, and new trends can be discovered in the data, enabling more complex analysis.

Pivot table functions work the same way in both Excel and Google Sheets.

How to Operate a Pivot Table

- DATA Entry Form: Where you enter all data
- Sandbox PIVOT TAB
- Pivot Table: Where you set up sort, filter data analysis
    - Pivot Field: These are the column names from the 'Data Entry Form' tab that include all the data the pivot table will use

- <u>ROW</u>: These are the *Pivot Field*s you want to show data for in the pivot table
- <u>Filter:</u> This is a *Pivot Field* which you can select (one or multiple) which filters the data in the pivot table for just the selected value(s)

<u>Important Steps</u>

- REFRESH Pivot Table – Right click A:3 on the Sandbox Pivot tab, select Refresh
- Only change, add new or delete data in the <u>Data Entry</u> TAB

<u>Key Instructions</u>

1. **<u>Data Entry</u>** – the 'Data Entry Form' tab is where each invoice is to be entered

    a. For each received invoice the following information should be entered:
        i. The **month** of the invoice
        ii. The **school** the invoice is for
        iii. The **supplier**
        iv. The **supply type** (food, non-food or other)
        v. The **invoice date** – *this is an optional field*
        vi. The invoice **amount**

    b. To enter a new invoice, perform the following steps
        i. Scroll to the bottom of the existing list of invoices and enter the new invoice in the blank row immediately below the last populated row.

        ii. The **month**, **school**, **supplier** and **supply type** fields have preselected values to enter
            1. Click into the empty cell and select the arrow to the right of the cell for the pick list
            2. Choose the appropriate value from the pick list
                a. You can also enter the value by typing so long as it is included in the pick list.

        iii. The **invoice date** and invoice **amount** fields must be manually typed in – there is no pick list for these fields
            1. Enter the **invoice date** as mm/dd/yyyy. *This is an optional step, the invoice date may be left blank*
            2. Enter the invoice **amount** in dollars and cents

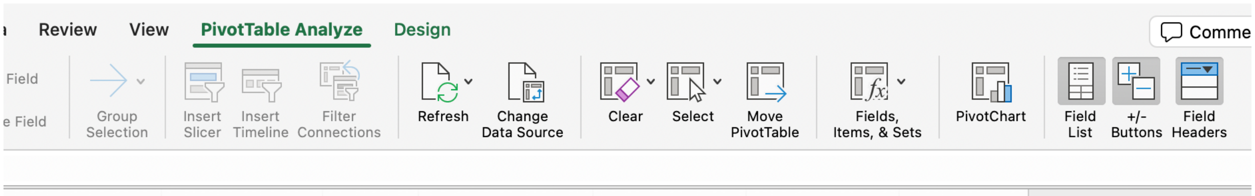
2. How to Turn on the Pivot Dialog Box

    b. Click the Sandbox Pivot Tab

    c. Click in Field D:3 – this what makes the <u>Pivot Table Analyze</u> menu option appear

d. In the MENU Bar – Click the Pivot Table ANALYZE Menu Option

e. Click the Field List



3. **Data summary** – the 'Sandbox Pivot' tab provides a summation of all invoice costs broken down by **month**, **school** and **supply type**

    a. After entering invoices (step 1b) switch to the 'Sandbox Pivot' tab

        i. The table shows the amount (dollars and cents) spent on all invoices by month, by school for food (column B), non-food / paper (column C) and other (column D).

            1. The invoices are totaled up on a monthly basis for the three types of invoices (food, non-food and other) in the **bolded rows**.
            2. The grand total for all invoices across all dates and all schools is shown in the bottom row of the table.

    b. Perform a right click in cell A:3 ("Sum of Amount"). From the popup select "Refresh". This action updates the table to include the invoices entered in step 1b. **This step must be performed each time to ensure all the invoices are accounted for.**

3. **Existing Reports –** The three existing reports are actually all Pivot Tables as well, that have just been set up in advance. Click on cell D:3 , and Select Pivot Table Analyze to turn on the Field dialog box, and then it is possible to select Supplier and that will show Month by School by Supplier. Following the same process, it is possible to turn on the Supplier data in School by Month report as well. Make sure to Refresh Data.

    a. Month by School Report
    b. School by Month Report
    c. Supplier by Month Report