COLLEGE OF ENGINEERING

LOCAL FARMERS **ANNOYED BY ANNUAL STATEMENT UPLOADS**

| Line 1a. Sales of livestock and other resale items: | | | | | |
|---|-----------|-----|--|--|--|
| \$ | 8,987 | .00 | | | |
| Line 1b. Cost or other basis of livestock or other items: | | | | | |
| \$ | 6,689,.54 | .00 | | | |
| Line 1c. Subtract line 1b from line 1a: | | | | | |
| \$ |] | .00 | | | |
| | | | | | |

Figure 2: The screenshot of entering financial data shows the drudgery of manual data entry that farmers wish to avoid.

AgBiz Logic is a website designed to help local farmers organize their annual financial data and make financial decisions. The site takes financial data in the form of income and expense documents as input, and produces a budget for the user based on their data.

Since our platform deals primarily in handling financial data, it needs methods for the user to get their data into the program. It takes too long for users to enter their data into AgBiz Logic by hand. Our project created an automatic importer that inserts the farmer's information into the AgBiz Logic database for them.



Electrical Engineering and Computer Science

AGBIZ LOGIC: WHERE DATA IS ALWAYS IN SEASON!

Saving Farmers From Laborious Data Uploads

| Step 1: Get CSV/Excel File | Step Categorize In | |
|---|---|---|
| | USDA | Select Ca Hassan J |
| | Hassan Jameel | Sales of |
| | | Custom Other In |
| | Mayberry Cooperative Elevator | |
| | | |
| | | |
| | | |
| The second se | | |
| Step 4: | Step | 5: |
| Step 4: Get CSV/Excel File | Step Categorize Ex | |
| | | pense Select C |
| | Categorize Ex | Select C Deere & Utility Land & A |
| | Deere & Company Benton County Electric System | Dense Select C Deere & |
| | Deere & Company Benton County | Select C Deere & Utility Land & A Rent or L |
| | Deere & Company Benton County Electric System | Select C Deere & Utility Land & A Rent or L Other Ex |

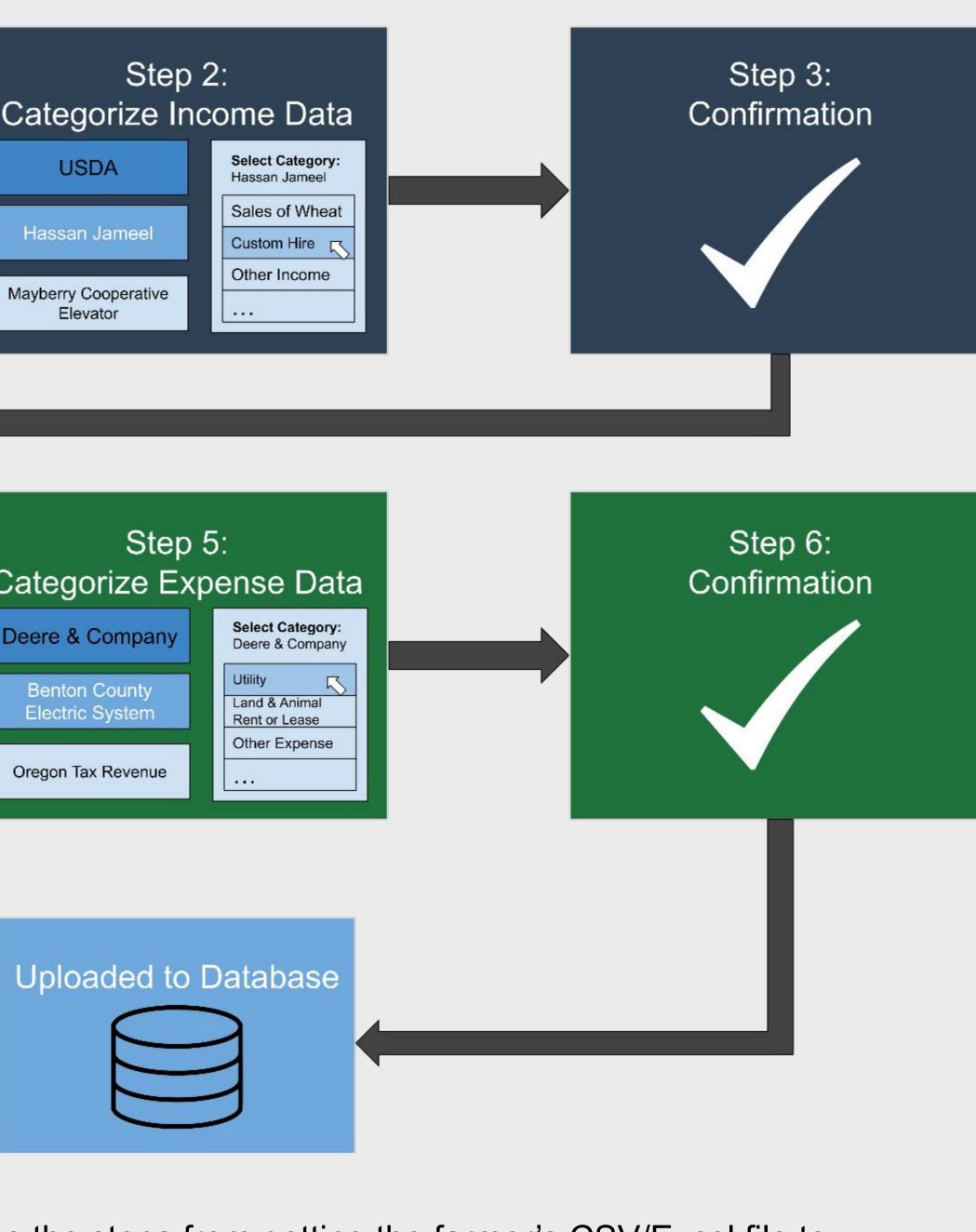


Figure 1: The flow diagram shows the steps from getting the farmer's CSV/Excel file to uploading into the AgBiz Logic[™] database.

HOW IS THE DATA CATEGORIZED?

The user's data is received in the form of two CSV/EXCEL files, one for income, and one for expenses.

The categories and amounts of each item in the CSV/EXCEL file are extracted. The categorizer matches a predicted category for each item.

The raw CSV/EXCEL file and what the categorizer creates are shown in Figures 3 and 4.

The items the categorizer failed to automatically categorize are shown to the user. The user manually categorizes these items in steps 2 and 5 in Figure 1.



| 1 | A | B |
|----|---|----------------|
| 1 | | FY End 6/14 |
| 2 | Expenses as of June 30 | Annual Expense |
| 3 | | |
| 4 | Utilities | 43,990.24 |
| 5 | Prof Services Incl. Fumigation, Hosting | 46,360.95 |
| 6 | Rent(\$2100 to others Bal to LeCompte) | 70,625.00 |
| 7 | Advertising | 10,605.63 |
| 8 | Insurance Property & Auto | 16,063.52 |
| 9 | Payroll Taxes & Insurance | 110,694.46 |
| 10 | State & Federal Taxes | 1,336.04 |
| 11 | Profit Sharing, Vacations, Bonus | 14,800.00 |
| 12 | Refunds, Interest, Donations, Misc | 23,501.37 |

Figure 3: This spreadsheet shows what the farmer had in their CSV/Excel file.

| After | | | | | | |
|---|----------------|---|--|--|--|--|
| ▼ Category ▼ | Amount 💌 | PredictedCategory 🔹 | | | | |
| 0 Expenses as of June 30 | Annual Expense | Unknown | | | | |
| 1 Utilities | 43,990.24 | Utilities | | | | |
| 2 Prof Services Incl. Fumigation, Hosting | 46,360.95 | Unknown | | | | |
| 3 Rent(\$2100 to others Bal to LeCompte) | 70,625.00 | Unknown | | | | |
| 4 Advertising | 10,605.63 | Unknown | | | | |
| 5 Insurance Property & Auto | 16,063.52 | Insurance (other than health) | | | | |
| 6 Payroll Taxes & Insurance | 110,694.46 | Other expenses: Payroll, state, federal taxes & payroll insurance | | | | |
| 7 State & Federal Taxes | 1,336.04 | Other expenses: Payroll, state, federal taxes & payroll insurance | | | | |
| 8 Profit Sharing, Vacations, Bonus | 14,800.00 | Pension and profit-sharing plans | | | | |
| 9 Refunds, Interest, Donations, Misc | 23,501.37 | Other expenses: Refunds, interest, donations, misc. | | | | |

Figure 4: This spreadsheet shows the categories the importer sorted the farmer's data into. Green - category matched automatically Orange - requires user categorization

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ACKNOWLEDGEMENTS

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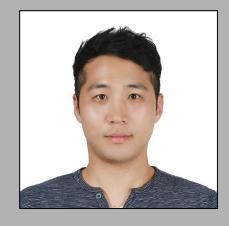


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