**MGMT 63350: Final Project Documentation for Part 1 – Audit Verification and Analysis**

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**Section A**

To verify the number of records for all data spreadsheets provided by \*\*\*\*\*, the COUNTA() and INDIRECT() are used to reference a specific spreadsheet and count the number of row entries within the specific sheet. This gives a value for the total recorded entries which can be used to compare to the client’s information.

From the verification method used to check the number entries, Figure 1 shows that all values that the client provided for record counts are true for all the spreadsheets provided. Hence, it concluded that for the audit all entries needed are within the given data.

|  |  |  |  |
| --- | --- | --- | --- |
| Part 1a | | | |
| **Sheet** | **Client Info** | **Number of Entries** | **Verification** |
| \*\*\*\*\*\_sales | 257023 | 257023 | TRUE |
| \*\*\*\*\*\_purchases | 40468 | 40468 | TRUE |
| \*\*\*\*\*\_purchase\_orders | 2476 | 2476 | TRUE |
| \*\*\*\*\*\_stores | 5 | 5 | TRUE |
| \*\*\*\*\*\_brands | 2803 | 2803 | TRUE |
| \*\*\*\*\*\_ending\_inventory | 7828 | 7828 | TRUE |
| \*\*\*\*\*\_begining\_inventory | 7383 | 7383 | TRUE |
| \*\*\*\*\*\_payroll | 735 | 735 | TRUE |

Figure 1. Excel Verification for Number (*File Reference: FinalProject\_Data\_Part1a-b.xlsx)*

**Section B**

The client wants to confirm that the following line items that appear in unaudited financial statements are supported by the given data. Thus, SUM() was used in order to calculate the total entries for the line items.

From Figure 2, it is confirmed that all unaudited line items are valid based on verification from the excel calculations.

|  |  |  |  |
| --- | --- | --- | --- |
| Part 1b | | | |
| **Line Item** | **Client Info** | **Sheet Total** | **Verification** |
| Sales | $5,849,638 | $5,849,638 | TRUE |
| Purchases | $4,192,479 | $4,192,479 | TRUE |
| Excise Taxes | $318,918 | $318,918 | TRUE |
| Freight | $21,631 | $21,631 | TRUE |
| Beginning Inventory | $869,636 | $869,636 | TRUE |
| Inventory Change | $134,579 | $134,579 | TRUE |
| Ending Inventory | $1,004,215 | $1,004,215 | TRUE |

Figure 2. Excel Verification for Unaudited Items (*File Reference: FinalProject\_Data\_Part1a-b.xlsx)*

**Section C**

To confirm whether the sales values given are correct within the data, the following formula is used below:

With the calculated sales, a comparison is made between given and calculated values using the IF() to determine whether or not the values are the same or not. In Figure 3, it is shown that all values are ‘TRUE’, which means all calculated sales values are the same as the given data value. Thus, it can be concluded that there are no discrepancies within the sales values.

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of Discrepencies in Sales** | | | |
| **TRUE** | **False** | TRUE | Calculated sales value = given data value |
| 257023 | 0 | FALSE | Calculated sales value ≠ given data value |

Figure 3. Comparison between calculated and given sales values (File Reference: *FinalProject\_Data\_Part1c-h.xlsx* )

**Section D**

To confirm whether the given purchase values are correct within the data, the following formula is used below:

With the calculated purchase, it is then compared similar to Section C with the given values using IF() to determine if any values are not the same. Figure 4 shows that all values are ‘TRUE’, which means all the given purchase data is correct with no discrepancies by verifying with the calculated values.

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of Discrepancies in Purchase** | | | |
| **TRUE** | **FALSE** | TRUE | Calculated purchase value = given data value |
| 40468 | 0 | FALSE | Calculated purchase value ≠ given data value |

Figure 4. Comparison between calculated and given purchase values (File Reference: *FinalProject\_Data\_Part1c-h.xlsx*)

**Section E**

To verify whether the excise taxes in the given data are accurate, the following formula below is used to calculate the excise taxes. There are two formulas as there are two categories of alcohol (spirit and wine) with different tax rates.

Using the formula, comparing the given and calculated excise tax values, it is found that all values are the same or relativity close with no significant differences.

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of Discrepencies in Excise Tax** | | | |
| **TRUE** | **FALSE** | TRUE | Calculated excise tax value = given data value |
| 257023 | 0 | FALSE | Calculated excise tax value ≠ given data value |

Figure 5. Comparison between calculated and given excise tax values (File Reference: *FinalProject\_Data\_Part1c-h.xlsx*)

**Section F**

The following formula has been used to calculate the Gross Margin rate by store and category.

|  |  |  |  |
| --- | --- | --- | --- |
| **Gross Margin Percentage Calculation by Store** | | | |
| **Store** | **Purchasing amount** | **Sales amount** | **Margin Rate** |
| 5 | 945,105.61 | 1,330,035.71 | 28.94% |
| 18 | 911,321.37 | 1,287,798.50 | 29.23% |
| 29 | 506,032.17 | 726,633.97 | 30.36% |
| 36 | 1,062,442.32 | 1,445,219.13 | 26.49% |
| 37 | 767,577.69 | 1,059,951.18 | 27.58% |
| SUM | 4,192,479.16 | 5,849,638.49 | 28.33% |

Figure 6. Gross margin percentages by store (File Reference: *FinalProject\_Data\_Part1c-h.xlsx*)

The gross margin rate across the different stores is on a similar level.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gross Margin Percentage Calculation by Category** | | | | |
| **Category** | **Purchasing amount** | **Sales amount** | **Margin Rate** | **mark-up** |
| spirits | 3,130,174.42 | 4,172,820.72 | 24.99% | 33.31% |
| wine | 1,062,304.74 | 1,676,817.77 | 36.65% | 57.85% |
| SUM | 4,192,479.16 | 5,849,638.49 | 28.33% | 39.53% |

Figure 7. Gross margin percentages and mark-ups by category (File Reference: *FinalProject\_Data\_Part1c-h.xlsx*)

The mark-up for spirits is 33.31%, closely aligning with the 35% benchmark; the mark-up for wine is 57.85%, exceeding the 50% benchmark but still within an acceptable range.

The gross margin of wine is higher than that of spirits because wine has a higher mark-up rate.

**Section G**

The following formula has been used to calculate the Gross Margin rate for each brand.

|  |  |  |  |
| --- | --- | --- | --- |
| **Negative Gross Margin Brand** | | | |
| **Brand** | **Sum of Sales Dollars** | **Cost of Pruduct** | **Gross Margin** |
| 1297 | 99.99 | 160.59 | -60.61% |
| 4102 | 163.84 | 174.88 | -6.74% |
| 4277 | 555.62 | 645.84 | -16.24% |
| 7680 | 56.97 | 59.04 | -3.63% |

Figure 8. Brands with negative gross margin rate (File Reference: *FinalProject\_Data\_Part1c-h.xlsx*)

For over 2700 brands, only 4 of them have a negative margin, it is normal for a few products to have temporary negative margins due to discounts, stock clearance, or seasonal fluctuations.

**Section H**

For checking if the following balance is equal, start by collecting data from the four tables: Beginning Inventory, Purchases, Sales, and Ending Inventory. Extract all distinct inventory IDs across these tables which in our case is 8808. This step is crucial because some products might appear in one table but not in another. For example, items sold out during the year may not appear in the Beginning or Ending Inventory tables but will be present in the Purchases and Sales tables.

After having all the distinct Inventory record, using the following formula to do the inventory check:

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of Discrepancies in Inventory Record** | | | |
| TRUE | FALSE | TRUE | Calculated Beginning Inventory + Purchases - Sales = Ending Inventory |
| 8808 | 0 | FALSE | Calculated Beginning Inventory + Purchases - Sales ≠ Ending Inventory |

Figure 9. All individual inventory quantities checking (File Reference: *FinalProject\_Data\_Part1c-h.xlsx*)

The inventory reconciliation confirms that all 8808 records align correctly, with no discrepancies detected.