**Ike’s Technical Specifications**

Ike’s Sales Data

1. On Sales\_Data tab
   1. Scroll to Last Column of Data entered
   2. Add new Date in first empty column
   3. Click on Data Tab and select Refresh All in the Queries & Connections section
      1. This will update all necessary tables in the backend with new data

Ike’s Process to Reorder

1. On Order\_Model tab
   1. Adjust for Seasonal Flavors and needed Inventory by manually inputting the demand in Colum Column D
   2. Click on the Button Create New Order
   3. This will create an Ordering\_Sheet showing the optimal ordering solution

Everything below is information of how the Solution was built; no additional functionality outside of standard Excel is required for this solution.

***If a sheet referenced below doesn’t appear in the final solution, it has been hidden and can be shown by unhiding the tab. To unhide a tab simply right click on a Table -> Choose Unhide in the Menu and then pick your table to unhide***

**Dashboard**

* Filters
  + *Flavor & Forecast Family*
    - Built using Slicer Tool in Excel from a Pivot Table
* Timeline
  + *Date*
    - Built using Timeline Tool in Excel from a Pivot Table
* Line Graphs
  + *Tubs Sold over Time*
    - Utilize pivot table on Sales\_Data\_Pivot -> Total Tubs Sold
  + *Forecasting Models*
    - Utilize pivot table on Sales\_Data\_Pivot -> Forecasted Tubs Sold Over Time
* Data Table
  + Column A (Flavors)
    - All the flavors that Ike can sell
* Column B (Current Inventory Tubs)
  + The Current Inventory at the time to purchase new stock
* Column C (Avg Tubs Sold Weekly)
  + Avg Tubs Per Flavor Sold Weekly based upon the Weeks to use for Forecasting (R2)
* Column D (Tubs per Day)
* Column E (Days to Stockout)
* Column F (Inventory After 2 Weeks)

**Sales\_Data Sheet**

* Similar to what Ike had before, when new data is entered on this page and refresh button is hit, the data will carry through to all pertinent tables

**Order\_Model Sheet**

* Column A (Flavors of Ice Cream)
* Column B (Tubs to Purchase)
  + Tubs Per Box is a reference to L3 and this allows for user to adjust the tubs per box
* Column C is used for showing the mathematical equation that we want Solver to process
* Column D (Forecasted Sales)
  + Part of this data comes from the Forecast\_Summary\_Sheet
* Column E (Total Boxes to Buy)
  + This field is used by Solver to tell us how many boxes of each flavor should be purchased
* Column F (Inventory After Delivery)
* Column G (Tubs per Day)
* Column H (Days to Stockout with New Inventory)
* Column J (Estimated Date to Stockout)
* Column K (Days Before Reorder)
* Column L (Inventory @ Reorder Date)
* Column M (Expected Sales During Delivery Window)
* Column N (Final Inventory Before Delivery)

**Forecast\_Summary Sheet**

* Column A (Forecast Method)
  + A listing of all the available methods for Forecasts
* Column B (Model Name)
* Column C (Criteria)
* Columns D through Column X
  + Individual flavors of the ice creams

**How to Add Flavors to the Model**

There are two separate procedures to follow depending upon if you are adding a seasonal flavor or regular flavor. See the appropriate section for the procedure to follow to add a flavor.

*Non-Seasonal Flavors*

1. Go to the Dashboard sheet
   1. Right-Click on the line in Excel where you want to add your new flavor in the Current Inventory and Days to Stockout
   2. Example:
      1. I want to add “Flyers Red”, click on Cell S22 and select everything over to Cell X22
      2. Right-Click and choose Insert Row -> Shift Cells Down
      3. Type “Flyers Red” in Cell S22
      4. Add Current Inventory Tubs
      5. Copy Formula in Cells W21 and X21 to Cells W22 and X22

|  |  |
| --- | --- |
| **Prior** | **Updated** |
|  |  |

1. Go to the Sales\_Data sheet
2. Right Click on the line in Excel where you want to insert your new flavor
   1. Example:
      1. I want to add “Flyers Red”, click on Line 15 in the Sales\_Data sheet, Right-Click to Insert a new Row
      2. Type “Flyers Red” into Column A Line 15
   2. Your flavor is now added to the Sales\_Data and can be used for tracking sales

|  |  |
| --- | --- |
| **Prior** | **Updated** |
| A table with numbers and text  Description automatically generated | A table with numbers and letters  Description automatically generated |

1. Click on Data in the Top Bar
2. In the Get & Transform Data select *From Table/Range*

This will open a Power Query Editor and the next steps walk you through how to create a new Table

1. In the Query Settings click in Applied Steps and remove Changed Type by clicking on the X
2. Highlight Column Flavors
3. Click Transform in the Top Toolbar -> Unpivot Columns -> Unpivot Other Columns

You should now see the following image

A computer screen shot of a black screen

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We need to Remove all the other flavors from this Query so in the dropdown menu for Flavors follow these steps:

1. Click on Load More to show the full list of Flavors
2. Click Select all to remove all checks from each flavor
3. Scroll down to “Flyers Red” and put a check mark in that Flavor
4. In Column 2 Rename this to Date and adjust the data type to Short Date
5. In Column 3 Rename this to Tubs Sold
6. Rename the Query to Flyer Red
7. Close and Keep the changes

You should now have a new sheet with a blank table

1. Unhide the Template\_Forecast Sheet
2. Copy Columns D3:AX3 and Paste on the new Sheet in Row 1 Column D
3. Go back to Template\_Forecast Sheet
4. Copy Rows 1 & 2 and Insert on the new Sheet in Row 1

A screenshot of a computer

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1. Click on Cell C2 and change the formula to reference the current spreadsheet
   1. IE change Birthday Cake to say Flyers Red in the example we’ve provided
2. Copy this formula to all remaining headers
3. Go to the Forecast\_Summary sheet
4. Select the column you want to insert your new data into
   1. Example
      1. Click on Column L and Insert Column
5. Copy the data from an existing Flavor Column and Paste into your New Blank Column
6. Change any cells that contain that old flavor to the new flavor you created
   1. Example
      1. If I copied Fudge Supreme I would change all other rows that had the word Fudge Supreme to Flyer\_Red
7. Go to the Order\_Model sheet
8. Right Click on the line in Excel where you want to insert your new flavor
   1. Example
      1. I want to add “Flyers Red”, click on Line 33 in the Order\_Model sheet, Right-Click to insert a new Row
      2. Type “Flyers Red” into Column A Line 33
   2. Your flavor is now added to the Order\_Model and can be used in the ordering model solution

A screenshot of a spreadsheet

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1. Go to Ordering\_Sheet
2. Scroll down to the Seasonal Flavor Orders section
3. Right Click on the line in Excel where you want to insert your new flavor
   1. Example
      1. I want to add “Flyers Red”, click on Line 38 on the Ordering\_Sheet, Right-Click to insert a new Row
      2. Type “Flyers Red” into Column A Line 38
4. You should now have 1 row of empty cells in Columns B & C
   1. For Column B you need to create a reference back to the appropriate Column E value on the Order Model Sheet
      1. Example
         1. For “Flyers Red” the cell call would be =ORDER\_MODEL!E33
   2. For Column C you need to create a reference back to the appropriate Column B value on the Order Model Sheet
      1. Example
         1. For “Flyers Red” the cell call would be =ORDER\_MODEL!B33

*Seasonal Flavors*

1. Go to the Sales\_Data sheet
2. Right Click on the line in Excel where you want to insert your new flavor
   1. Example:
      1. I want to add “Flyers Red”, click on Line 15 in the Sales\_Data sheet, Right-Click to Insert a new Row
      2. Type “Flyers Red” into Column A Line 15
   2. Your flavor is now added to the Sales\_Data and can be used for tracking sales
3. Go to the Order\_Model sheet
4. Right Click on the line in Excel where you want to insert your new flavor
   1. Example
      1. I want to add “Flyers Red”, click on Line 33 in the Order\_Model sheet, Right-Click to insert a new Row
      2. Type “Flyers Red” into Column A Line 33
   2. Your flavor is now added to the Order\_Model and can be used in the ordering model solution
5. Go to Ordering\_Sheet
6. Scroll down to the Seasonal Flavor Orders section
7. Right Click on the line in Excel where you want to insert your new flavor
   1. Example
      1. I want to add “Flyers Red”, click on Line 38 on the Ordering\_Sheet, Right-Click to insert a new Row
      2. Type “Flyers Red” into Column A Line 38
8. You should now have 1 row of empty cells in Columns B & C
   1. For Column B you need to create a reference back to the appropriate Column E value on the Order Model Sheet
      1. Example
         1. For “Flyers Red” the cell call would be =ORDER\_MODEL!E33
   2. For Column C you need to create a reference back to the appropriate Column B value on the Order Model Sheet
      1. Example
         1. For “Flyers Red” the cell call would be =ORDER\_MODEL!B33

Once you have created the above you are all completed with adding a Seasonal Flavor