

Introduction:

This document will demonstrate the steps to create Cross Functional Visio diagram from Excel, a feature available only on Visio Pro for Office 365 (at the time of writing this article).

This has simple steps, does not require any programming knowledge and the Visio diagram can be easily created/refreshed in few clicks. It will take away the time & pain in creating Visio diagram manually from scratch.

Pre-Requisites:

This approach will work only on Visio Pro for Office 365 (version limitation at the time of writing this article, it is not clear if Microsoft will extend this feature to desktop version in future).

This approach requires knowledge on creating tables in Excel, and it does not require any programming knowledge.

The input Excel data needs to be in a certain format which will be described in below steps.

Steps:

1. Create an excel with following columns, fill the content and convert this into a table.

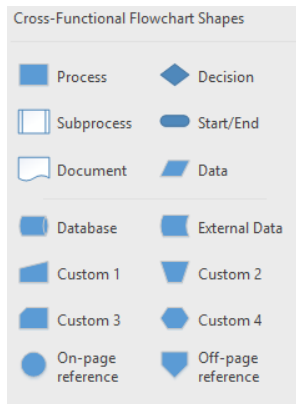
Each of these columns are required.

Process Step ID	Process Step Description	Next Step ID	Connector Lable	Shape Type	Function	Phase
1	dbo.Resource	3	Acquire_ETL	External Data	External Source	Data
2	dbo.Booking	4	Acquire_ETL	External Data	External Source	Data
3	dbo.Resource	5	Integrate_ETL	Data	Staging	Data
4	dbo.Booking	6	Integrate_ETL	Data	Staging	Data
5	dbo.ResourceDimension	7	Reported_In	Data	Data Mart	Data
6	dbo.BookingFact	7	Reported_In	Data	Data Mart	Data
7	Resource Booking Details Report			Document	Reports	Data

Refer to “How Excel columns interact with Visio flowchart components” section [here](#) in MS Document to get a description on these column.

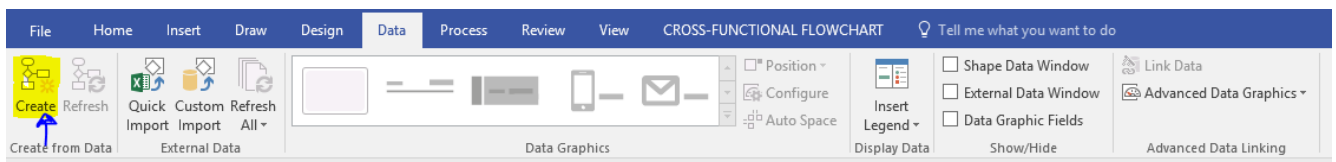
In summary,

- a. **Process Step ID** - Unique ID for each shape that needs to be created in Visio
- b. **Process Step Description** - Description for each shape that needs to be created in Visio
- c. **Next Step ID** - To indicate the next process step that a step/share needs to connect to
- d. **Connect Lable** - A description/name for the connector
- e. **Share Type** - Visio shape type. i.e.



- f. **Function** - Function name for Visio cross-functional flowchart, that a shape belongs to
- g. **Phase** - Phase name for Visio cross-functional flowchart, that a shape belongs to

2. Open Visio and create a blank “Cross-Functional flowchart”. Once done, Go to Data → click “Create” from data. Click Next.



3. Select diagram type, excel workbook and table name in pop-up window. Click Next.

Create Diagram from Data

Step 1: Connect to an Excel workbook to create the diagram

What diagram do you want to create from data?

Cross Functional Flowchart (horizontal)

Select an Excel workbook (or use the associated [Excel Template](#)):

D:\GitHub\Visio\CreateVisioFromExcel\Sample1_InputExcel.xlsx

Browse...

Select a table or a custom range in the workbook:

tblInputTable1

Custom Range...

Note: To keep your diagram in sync with the data, ensure that your data is represented as a table in the Excel workbook.

Step 1 of 5

Cancel < Back Next > Finish

4. Map the Function & Phase fields from the excel table. Click Next.

Create Diagram from Data

?

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Step 2: Choose the columns in your data to create the functions and phases in the diagram

Available Columns

Process Step ID

Process Step Description

Next Step ID

Connector Label

Shape Type

Function

Phase

Mapping

Map the columns from your data to the diagram fields.

Function or Swimlane (required): ⓘ

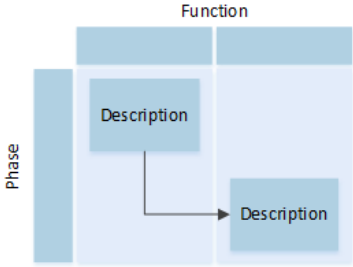
Function

Phase or Timeline: ⓘ

Phase

More Options

Clear All



Step 2 of 5

Cancel

< Back

Next >

Finish

5. Map the Process Step ID, Description & Shape Type fields from the excel table. Click Next.

Create Diagram from Data

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Step 3: Choose the columns in your data to create the process steps / activities in the diagram

Available Columns

Process Step ID

Process Step Description

Next Step ID

Connector Label

Shape Type

Function

Phase

Mapping

Clear All

Map the columns from your data to the diagram fields.

Process Step ID / Activity ID (required): ⓘ

Process Step ID

Process Step / Activity Description: ⓘ

Process Step Description

Shape Type for Process Steps / Activities: ⓘ

Shape Type

Accessability

Diagram Preview

Step 3 of 5

Cancel

< Back

Next >

Finish

6. Map the Shape Type to relevant shapes. Click Next.

Create Diagram from Data

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Step 4: Choose an appropriate shape for each value listed in the 'Shape Type' column

Note: If shapes are not specified, the default shape created is 'Basic Flowchart Shapes: Process'

Shape Type

Shapes

Clear All

External Data

External Data

Data

Data

Document

Document

Basic Flowchart Shapes

Cross-Functional Flowchart Shapes

Process

Decision

Subprocess

Start/End

Document

Data

Database

External D...

Custom 1

Custom 2

Custom 3

Custom 4

On-page ...

Off-page ...

Step 4 of 5

Cancel

< Back

Next >

Finish

7. Map Next Step ID & Connector Label. Click Finish.

Create Diagram from Data ? X

Step 5: Choose the columns in your data to connect the process steps / activities

Available Columns

Next Step ID
Connector Label

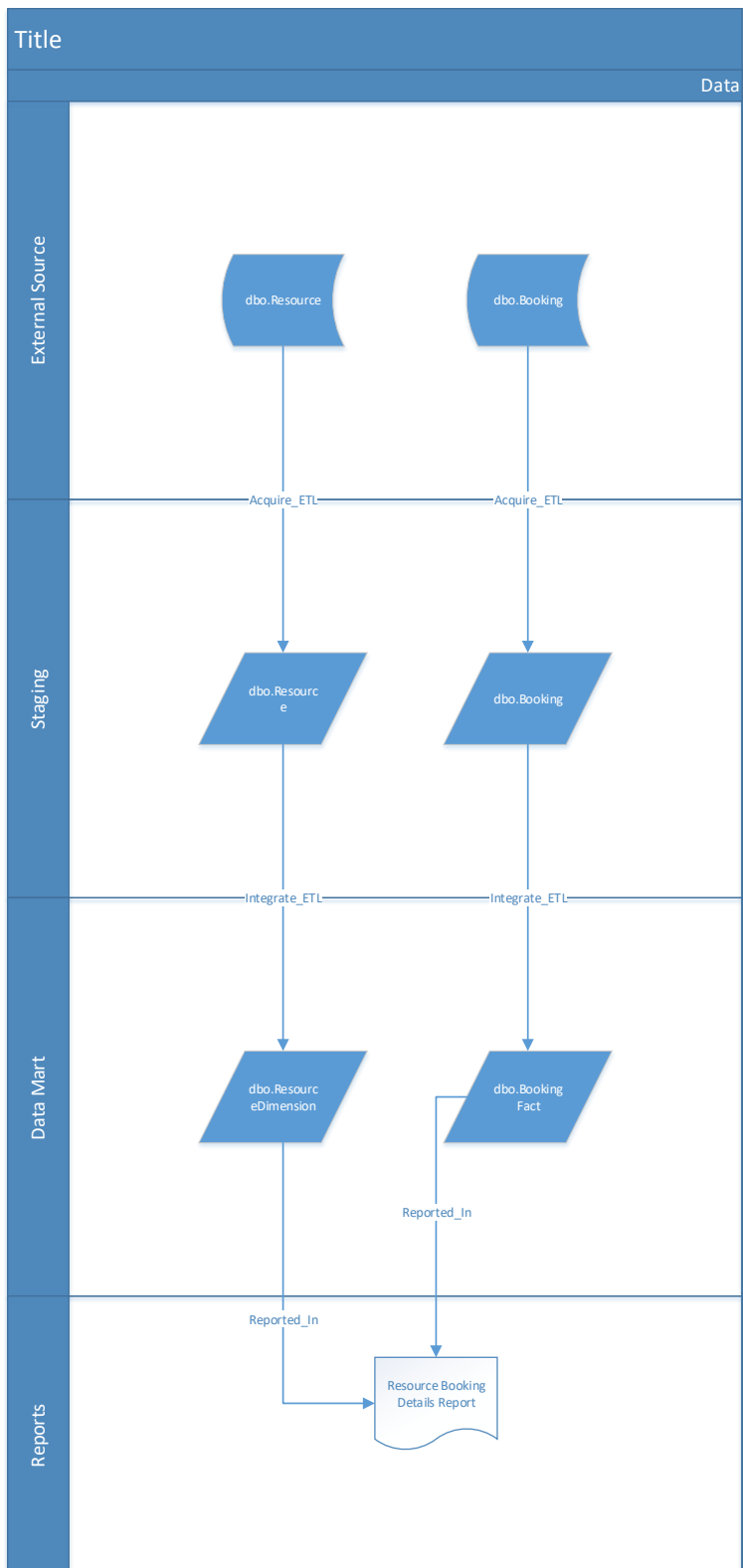
Mapping [Clear All](#)

Map the columns from your data to the diagram fields.
Specify how to connect the process steps / activities:
Connect using column
Specify column name: [?](#)
Next Step ID X
Specify the relationship identified by the mapped column:
☒ Next Step
☐ Previous Step
Delimiter: [?](#)
(none)
Connector Label: [?](#)
Connector Label X

The diagram shows a 'Phase' container. Inside, there is a 'Function' box which contains a 'Description' box. To the right of the 'Function' box is a 'Text' box, and to the right of the 'Text' box is another 'Description' box. An arrow points from the 'Text' box to the second 'Description' box.

8. The below Visio diagram will be created.

Heading



Reference:

[Microsoft Article: Create a Data Visualizer diagram](#)

Note:

- I have created Horizontal Cross-Functional flowchart and would suggest using the same at this point, because the Vertical flowchart is not aligning properly (assuming it as a limitation with this approach) hence the bigger charts are not readable.
- If the underlying Excel data is updated, then the same can be reflected to Visio diagram with a single click.

