How to build Dashboard - Step by Step tutorial/recipe

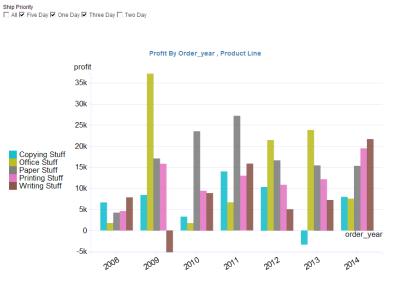
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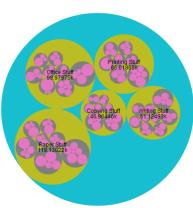
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How to create Excel Dashboard [as direct connection]

We will learn how to create web based Excel dashboards.

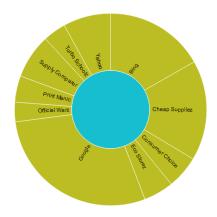
And this is the exact dashboard we are going to build





Profit By Product Line, Affiliate, Order_year

Profit By Affiliate



P	rofit By C	Order_yea	r , Custor	ner Class	,Product	Line	
vear	2008	2009	2010	2011	2012	2013	

	order_year	2008	2009	2010	2011	2012	2013	2014	Grand Tota
Customer Class	Product Line	profit (sum)	profit (sum)	profit [sum]	profit [sum				
Corporation	Copying Stuff	-10027	3135	5184	15476	-1175	-766	17409	29235
	Office Stuff	10835	23577	4124	872	16448	18271	21454	95582
	Paper Stuff	16761	21627	18667	15047	7431	-1806	11005	88731
	Printing Stuff	1869	24149	29054	3808	11952	9564	26411	106808
	Writing Stuff	6774	5030	11333	21850	3230	7287	9517	65020
Total: Corporation		26213	77518	68362	57053	37886	32549	85796	385375
😑 Family	Copying Stuff	3276	2766	2112	1662	-1752	-7987	3306	3383
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	Paper Stuff	6307	10613	21121	1397	-3691	10893	3293	49934
	Printing Stuff	-7487	6203	6335	9942	1088	8522	4618	2921
	Writing Stuff	-248	-392	-972	14694	3576	8369	-307	24720
Fotal: Family		3688	20654	42967	30893		27190		150182
 Hospital 	Copying Stuff	4666	3411	-2498	8512	4000	7495	5365	30951
	Office Stuff	789	25544	9036	-873	-13398	10189	-663	30624
	Paper Stuff	-10522	1823			6852	15236	18844	5360
	Printing Stuff	994	7836	6155	-1118	2418	14935	7569	38789
	Writing Stuff	4799					9712		63700
Fotal: Hospital		725	47823	30608	24543	12613	57568	43789	217669
School	Copying Stuff	1944	499				1841		16525
	Office Stuff	1220	1953	2474	4142	16312	6751	587	33438
	Paper Stuff	611	4279	-107	1912	21447	2883	-84	30942
	Printing Stuff	1305	1010	-4898	743	15348	714	-1102	1312
	Writing Stuff	1191	-1138	962	923	-2701	244	-1194	-1714
Fotal: School		6270	6603		10315	55216	12432		9231
😑 Small Business	Copying Stuff	2287	1568		-2291	-3706	5554		22148
	Office Stuff	-1547	1424	12022	21082	3843	8563	8552	5393
	Paper Stuff	9585	2768	6404	20698	5963	15488	16418	77324
	Printing Stuff	8992	5506	9130	10907	10934	9042	-706	53804
	Writing Stuff	8203	8539	15734	4079	5134	3527	2248	47463
Fotal: Small Busines	SS	27519	19806	48716			42174		254678
Grand Total		64416	172404	190888	177278	140418	171913	182900	1100217

http://www.infocaptor.com

- 1. Prepare the excel file
- 2. Create a connection to Excel
- 3. Visualize the data and build analysis
- 4. Add analysis to the dashboards
- 5. Add parameters to the dashboard
- 6. Publish the Dashboard
- 1. Download the infocaptor_online_retail Data file you will need for your practice

http://infocaptor.s3.amazonaws.com/infocaptor_online_retailer.xlsx

2. Download and install InfoCaptor software

Here are the instructions and link to the zip download

http://infocaptor.com/help/install_dashboard_on_standalone_computer_or_laptop.htm

Purpose of this Dashboard tutorial

Complete guide on **building dashboards** using Excel, Access and any other Database as the data source.

The tutorial will start with instructions on building a dashboard using Excel Files.

The purpose is not just to build any dashboard but a good and useful dashboard that is modular in design and easy to maintain and scale it.

Excel Dashboards

Databases are often under lock-n-key of the IT Department and not possible to connect directly due to security reasons. So if you plan to build a Dashboard prototype or a Dashboard Mockup it makes sense to export the data to Excel and build it.

Modular Dashboard Design

Lot of the online tutorials and Dashboard e-books teach you to build dashboard in Excel file. They provide you with templates, you fill in the information and build the dashboard using Excel charting techniques.

If you use Excel Templates for your real dashboarding needs then you may end up with any of the below problems.

- Big Bulky and bloated excel files
- Undocumented Macros
- Zero verification on the data authencity
- No way to refresh the dashboard (lost productivity)
- •

Best Practice for Dashboard Design

Use Modular Design - Keep Data and Presentation Separate

How? – Use Excel only for storing your data. Nothing more. Do not build any visualization in the same place where your Data resides. In short, your excel files should contain only the data.

Benefits of this approach

- Your dashboard or presentation layer is independent Dashboard definition is stored separately
- Increased productivity When you have fresh data just refresh the dashboard, no redevelopment needed
- No Messy Excel Macros or coding knowledge required Just drag and drop tables and visually build Tables, Charts, Speedometer, Gauges, Dials, Thermometers and more charts
- **Simplified Distribution and Presentation** You can Export the Dashboard to PDF or HTML and just send them as attachments
- **Save Time** Just build the dashboard presentation layer only once and automate the refreshes.

•

Data Preparation

There are certain rules to be followed when you get the data in Excel files. Here is a sample Excel file for the online retailer example.

The first row is always treated as the column names.

	infocaptor_o	nline_retaile	er.xlsx							
	А	В	С	D	E	F	G	Н	I	
1	Ship Prior	Customer	Category	Product Li	Warehous	Region lo	Census Di	State or Pi	ord_date	First row is always th
2	Five Day	Corporatio	book shel	Office Stu	Central W	Midwest	East North	Illinois	8/28/2009	column names. Íf you
3	Five Day	Corporatio	book shel	Office Stu	Central W	Midwest	East North	Ohio	3/15/2009	don't have then make
4	Five Day	Corporatio	book shel	Office Stu	Central W	Midwest	West Nor	Minnesota	1/11/2010	sure to add column
5	Five Day	Corporatio	book shel	Office Stu	Central W	Midwest	West Nor	South Dak	6/22/2014	names as the first
6	Five Day	Corporatio	book shel	Office Stu	North We	Midwest	East North	Illinois	8/5/2009	row
7	Five Day	Corporatio	book shel	Office Stu	North We	Midwest	West Nor	Kansas	4/11/2012	
8	Five Day	Corporatio	book shel	Office Stu	South We	Midwest	West Nor	Missouri	2/25/2010	
9	Five Day	Corporatio	chair	Office Stu	Central W	Midwest	East North	Illinois	12/24/2010	
10	Five Day	Corporatio	chair	Office Stu	North We	Midwest	East North	Illinois	2/18/2008	
11	Five Day	Corporatio	desk	Office Stu	Central W	Midwest	East North	Illinois	6/14/2012	
12	Five Day	Corporatio	desk	Office Stu	Central W	Midwest	East North	Michigan	9/11/2012	
13	Five Day	Corporatio	desk	Office Stu	South We	Midwest	West Nor	Minnesota	4/26/2010	
14	Five Day	Corporatio	desk	Office Stu	South We	Midwest	West Nor	Missouri	5/18/2013	
15	Five Day	Corporatio	file holde	Paper Stu	Central W	Midwest	East North	Michigan	1/1/2011	
16	Five Day	Corporatio	file holde	Paper Stu	North East	Midwest	West Nor	Minnesota	4/25/2009	
			file holde	Paper Stu	South We	Midwest	East North	Illinois	3/20/2012	
14	tra	nsactions	<u>_</u>							
		\								

Provide a name to the worksheet. Avoid white space or blank characters in the worksheet name. Avoid numbers as the first letter and avoid special characters

In this tutorial we are going to connect directly to the Excel file as a database. There are alternative ways to work with Excel/CSV data and we will discuss them later.

Rules for the Excel File

1. It should be a simple table structure (no pivot tables : if your data is pivot like then you need to unpivot the data)

2. First row is the column names

3. The worksheet name should begin with a character and there should be no special characters

Benefits of connecting and using Excel file as database table

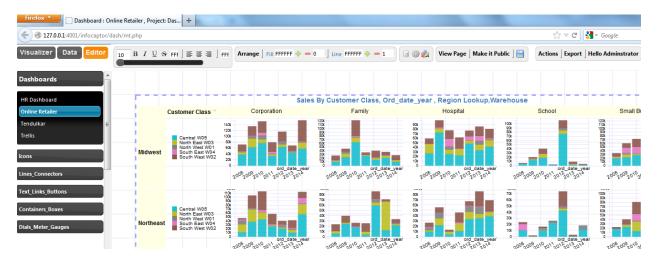
- We can put the dashboards on a central windows machine
- Everyone in your organization can login and view the dashboards using their browser
- You can simply replace a new updated version of Excel file and the dashboard will show the latest information without you needing to do anything.

Launch InfoCaptor Dashboard

Follow the steps listed in the below URL

http://infocaptor.com/help/install_dashboard_on_standalone_computer_or_lapt op.htm

Once launched and running, you should see the browser open with the dashboard URL.



The software comes packaged with sample dashboards and that is what you see when you launch it.

Let us begin our dashboard building journey.

1. Go to the menu Actions and create new Project "Online Retail"

Make it Public 🛛 🔚	Actions $\ \ \subseteq$ Export $\ \subseteq$ Hello Adminstrator
	New Project
	New Page
	Browse My Projects
	Browse Shared Projects
	Browse Image Library
	Manage Projects/Users
	Upload Images
	Refresh Dashboard Data (Ctrl + R)
	Manage Data Source/Connections
	Upload Flat Files/Excel Files
	Save Page

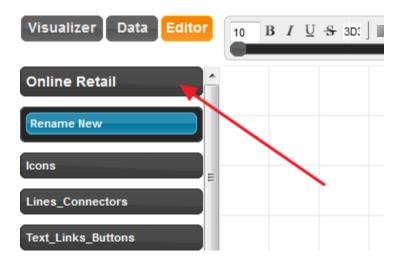
It will prompt you to give a name to your project



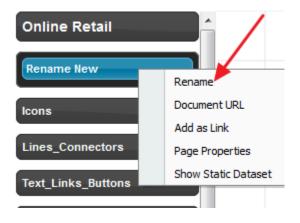
We will name it "Online Retail"

Click OK.

It will create a new project and add a new dashboard page that you can see on the left panel.



Right click on the "Rename New" and you will see the following options



We will select 'Rename' and give a name "Sales Dashboard"



Connect to the Excel File

Go to the Action menu and select "Manage Data Source/Connections"

Actions Export Hello Adminstrator
New Project
New Page
Browse My Projects
Browse Shared Projects
Browse Image Library
Manage Projects/Users
Upload Images
Refresh Dashboard Data (Ctrl + R)
Manage Data Source/Connections
Upload Flat Files/Excel Files
Save Page

It should open another page where you can define database and Excel connections

<u>Google Analytics</u> <u>HTTP Post</u>	All fields are required.
Native PHP Connections	Excel File Connection
• Excel	Connection Handle
• <u>Access</u> • <u>MySQL</u>	(full path e.g c:\somedirectory\my.xls)
JDBC Connections	Excel File Path
Oracle SQL Server	Windows Version Windows 7 -
<u>MySQL</u> <u>PostgresSQL</u>	Excel Version Excel 2007 -
Pervasive	Description
Other JDBC ODBC	Test Connection Add new Connection Entry
<u>Upload Flat Files/Excel</u> <u>Files</u>	

Click on the Excel link and it will show you the fields to enter Excel file details.

Our excel file is located in the "c:\samples" directory

So we enter the full path to the Excel file as below

All fields are required.

Excel File Connection	
	infocaptor_online_retail
(full path e.g c:\somedirectory\my.x	ls)
Excel File Path	C:\samples\infocaptor_online_retailer.xlsx
Windows Version	Windows 7 -
Excel Version	Excel 2007 -
Description	
Test Connection Add new Co	nnection Entry

We give a connection handle name so we can identify what this connection is about.

Click on the "Test Connection" button

Test Connection Add new Connection Entry

Excel File valid

Table List infocaptor_online_retailer.xlsx

After clicking "Test Connection" it immediately tells us the file is valid. This is important if we misspelled the directory name or some filename.

Now click on "Add new Connection Entry" button

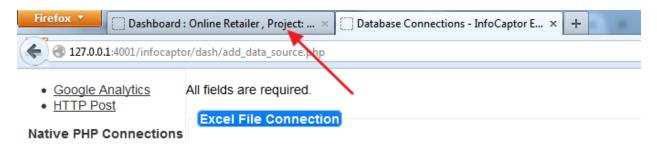


[infocaptor_online_retail] added successfully. You can use this handle in your queries

Excel File valid

Table List infocaptor_online_retailer.xlsx

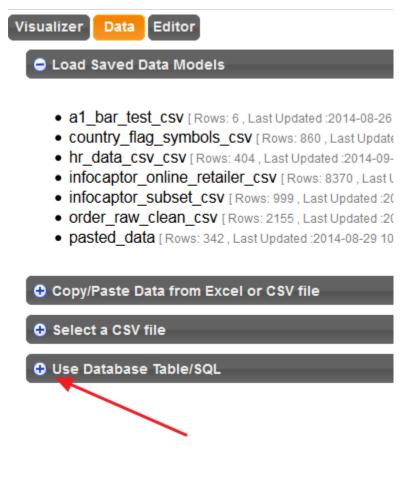
Now switch the browser tab to go back to the Dashboard Editor



On the top left you will 3 tabs



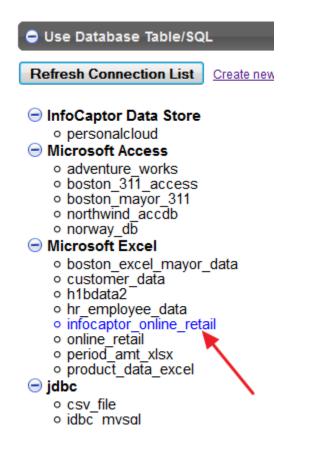
Click on the "Data" tab



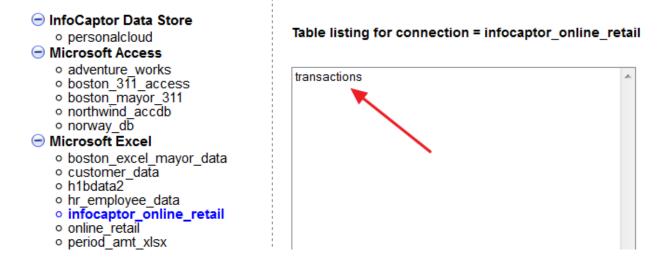
Expand the "Use Database Table/SQL"

Fetch Database Connections

Click on the "Fetch Database Connections"



Click on our newest connection that we just created "infocaptor_online_retail"



Click on the worksheet name "transactions"

Table listing for connection = infocaptor_online_retail	ple Data from Table = [transactions\$]	
transactions	o Customer rity Class Category Product Warehouse	Region Census State or lookup Division Province ord_date affiliate disco
	Day Corporation book shelf Office Central W05	East Midwest North Illinois 2009-08-28 Consumer Central 00:00:00 Choice 0.14
	Day Corporation book shelf Office Central W05	East 2009-03-15 Supply Midwest North Ohio 00:00:00 Comparer 0.06 Central
	Day Corporation book shelf Office Central W05	West Midwest North Minnesota 2010-01-11 D0:00:00 Central 0.08
	Day Corporation book shelf Office Central W05	West South 2014-06-22 Midwest North Dakota 00:00:00 Google 0.21 Central
	Day Corporation book shelf Office North West Stuff W01	East 2009-08-05 Cheap Midwest North Illinois 00:00:00 Suppliez 0.03 Central
Analyze Data from selected Table	Day Corporation book shelf Office North West	West 2012-04-11 Midwest North Kansas 00:00:00 Google 0.18

On the right side, you will see a list of sample data.

Click on the "Analyze Data from selected Table"

This action will bring the data and switch the tab to "Visualizer"

Visualizer Data Editor
Background 📰 No Colc 👻
Data Ⅲ d3 color ▼ ■ Reverse Colors
Change Properties
Visualize As 🌆
Normal Pivot 🔹
🔂 Analysis Options
Dimensions
Category Census Division Customer Class Product Line Region lookup Ship Priority State or Province Warehouse affiliate ord_date
😑 Measures
count discount order_year profit qty sales ship cost unit price
🕂 Formulas

The Visualizer put the order_year column into measures bucket so we simply drag and bring it to the Dimensions bucket.

Dimensions	
affiliate Category Census Division Customer Class ord_date order_year Product Line Region lookup Ship Priority State or Province	
Warehouse	
count discount profit qty sales ship cost unit price	
🕀 Formulas	

As you see, it has nicely separated the Dimensions and measures based on the column types. These are the column names from the first row of the excel file.

Build the first chart

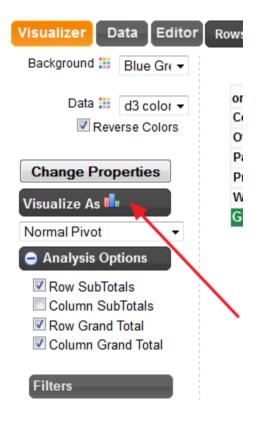
In the Visualizer, drag the following fields

- 1. Drag "Product Line" to rows
- 2. Drag "order_year" to cols
- 3. Drag "Sales" to values

Once you finish dragging, the Visualizer keeps building the pivot as you finish dragging so it provides a nice visual feedback. Your final pivot should like below

Rows Produc	t Line:				<u>*</u>	Cols	order_
	Sales E	By Orde	er_year	r , Prod	luct Lir	ne	
order_year →	2008	2009	2010	2011	2012	2013	2014
Copying Stuff	83709	158020	120507	215557	197066	142060	257408
Office Stuff	168762	292146	382266	362066	361252	318005	318314
Paper Stuff	252024	338045	471536	271505	335134	358146	402449
Printing Stuff	96489	285718	201063	215834	225887	206976	220195
Writing Stuff	130879	266150	217557	276961	269851	167191	210523

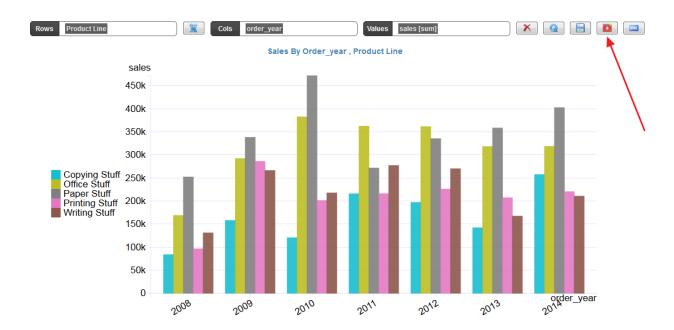
We will invoke the Visualizer Picker to change it to a bar chart.



Click on the "Visualize As" region and it will open the following picker



Click on the "Grouped Vertical Bar chart"



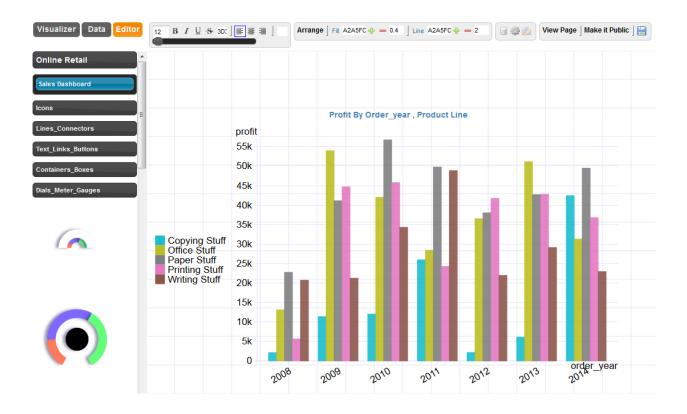
You should now see the above chart

Add Chart to the dashboard

Click on the plus icon that says "Add to dashboard" when you hover on it.

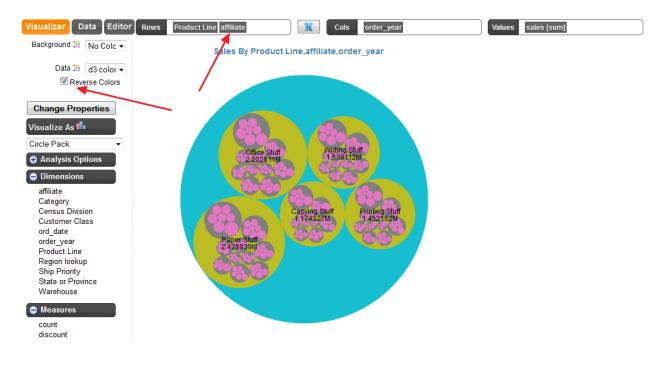


Your first chart is now added to the dashboard. Since this is a direct connection to Excel file you don't need to save any data.

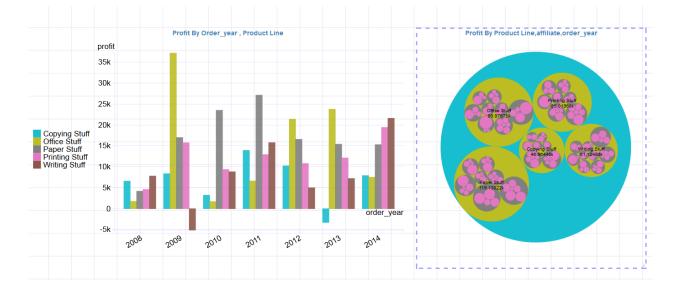


Add Circle Pack hierarchical visualization to the Dashboard

- 1. Switch back to the Visualizer
- 2. Add one more dimension "affiliates" to the Rows bucket
- 3. Select "Circle Pack" from the Visualizer drop down
- 4. Reverse the colors



Now click again on the "+" icon to add to the dashboard



Your dashboard should have now two widgets as below

Add a pivot table to the dashboard

1. Switch to the Visualizer

- 2. Add "Customer Class" to the left of "Product Line"
- 3. Remove "Sales" and add "Profit"



4.

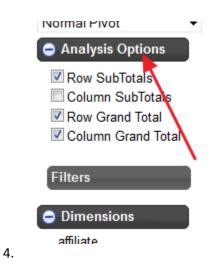
5.

ows Custome	r Class Produc	ct Line		*	Col	S 0	rder_ye	ear		Values	profit [sum
Profit	By Order_ye	ar , Cu	istom	er Cla	iss,Pr	oduct	Line				
	order_year →	2008			2011	2012	2013				
Corporation	Copying Stuff				15476			17409			
	Office Stuff		23577	4124	872		18271				
	Paper Stuff					7431		11005			
	Printing Stuff				3808	11952		26411			
	Writing Stuff	6774		11333				9517			
Family	Copying Stuff	3276				-1752		3306			
	Office Stuff	1840		14371	3198			1346			
	Paper Stuff		10613		1397	-3691		3293			
	Printing Stuff	-7487	6203			1088		4618			
	Writing Stuff	-248			14694	3576		-307			
Hospital	Copying Stuff	4666	3411			4000		5365			
	Office Stuff		25544			-13398		-663			
	Paper Stuff	-10522					15236				
	Printing Stuff	994	7836				14935	7569			
Cabaal	Writing Stuff	4799	9209			12741		12674			
School	Copying Stuff Office Stuff	1944 1220	499 1953		2594 4142	4810 16312		3033 587			
	Paper Stuff	611	4279		1912			-84			
	Paper Stuff Printing Stuff	1305	4279		743			-84			
	Writing Stuff	1191				-2701		-1194			
Small Business	2	2287	1568			-3706		13309			
sman Dusiness	Office Stuff	-1547		12022		3843					
	Paper Stuff	9585			20698						
	Printing Stuff	8992			10907	10934		-706			
	Writing Stuff	8203		15734		5134		2248			
	whiting staff	0203	0559	13734	4079	5154	5521	2240			

Add Row sub-totals and Column Grand total

Expand the "Analysis Options" and then

- 1. Select Row subtotals
- 2. Select Row Grand total
- 3. Select Column Grand Total



Change the color palette

1. Click on the color palette icon



2. Select the "Red Yellow Green" palette

	Profit By Or	der_ye	ear , Cu	istome	r Class	s,Produ	uct Lin	e		
	order_year →	2008	2009	2010	2011	2012	2013	2014	Grand Total	Data Color Picker 🛛 🗙
Corporation	Copying Stuff	-10027	3135	5184	15476	-1175	-766	17409	29235	âmun A
	Office Stuff	10835	23577	4124	872	16448	18271	21454	95582	Oranges
	Paper Stuff	16761	21627	18667	15047	7431	-1806	11005	88731	Reds
	Printing Stuff	1869	24149	29054	3808	11952	9564	26411	106808	Grevs
	Writing Stuff	6774	5030	11333	21850	3230	7287	9517	65020	Greys
Total: Corporation		26213	77518	68362	57053	37886	32549	85796	385375	Purple Orange
Family	Copying Stuff	3276	2766	2112	1662	-1752	-7987	3306	3383	Brown
	Office Stuff	1840	1464	14371	3198	13313	7394	1346	42926	
	Paper Stuff	6307	10613	21121	1397	-3691	10893	3293	49934	Purple Green
	Printing Stuff	-7487	6203	6335	9942	1088	8522	4618	29218	PiYG
	Writing Stuff	-248	-392	-972	14694	3576	8369	-307	24720	
Total: Family		3688	20654		30893	12534	27190		150182	Red Blue
😑 Hospital	Copying Stuff	4666	3411	-2498	8512	4000	7495	5365	30951	Red Gy
	Office Stuff	789	25544	9036	-873	-13398	10189	-663	30624	
	-	-10522	1823	10659	10713	6852	15236	18844	53605	Red Yellow Blue
	Printing Stuff	994	7836	6155	-1118	2418	14935	7569	38789	Spectral
	Writing Stuff	4799	9209	7256	7309	12741	9712	12674	63700	
Total: Hospital		725	47823	30608	24543	12613			217669	Red Yellow Green
School	Copying Stuff	1944	499	1804	2594	4810	1841	3033	16525	Accent
	Office Stuff	1220	1953	2474	4142	16312	6751	587	33438	
	Paper Stuff	611	4279	-107	1912	21447	2883	-84	30942	Dark2
	Printing Stuff	1305	1010	-4898	743	15348	714	-1102	13120	Paired
	Writing Stuff	1191	-1138	962	923	-2701	244	-1194	-1714	
Total: School	Conving Ctuff	6270	6603	235	10315	55216 -3706	12432	1240 13309	92312	Pastel 1
Small Business		2287	1568	5427	21082		5554	8552	22148	Pastel 2
	Office Stuff	-1547	1424	12022		3843	8563 15488	8552	53939	4 Ⅲ →
	Paper Stuff Printing Stuff	9585 8992	2768 5506	6404 9130	20698 10907	5963 10934	15488 9042	-706	77324 53804	
	-	8992	8539	9130 15734	4079	5134	3527	2248	53804 47463	Close
Total: Small Busines	Writing Stuff					22168			47463 254678	
Grand Total	55					22168			204678	
		04410	112404	130000	11210	140410	11 1515	102500	1100211	

Your pivot table is now automatically color coded to a Heatmap. The negative numbers are deep red and the higher positive numbers are green.

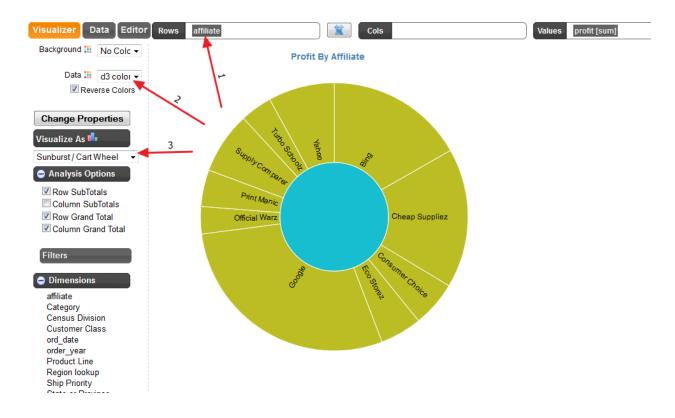
Add this pivot table to the dashboard.

Visualizer Data Editor	10 B	<i>I</i> <u>U</u> S FFF] ≣	: = = FFF	Arran	ge Fill	FFFFFF 🔶	- 0]	Line FFFFFF	+ - 1		Uiew 🛛	Page ∫ Make it Pub
Online Retail	0											
Sales Dashboard	-5k									order_	year	
Lines_Connectors		2008	2009	2010		2011	2012	2	J ¹³	2014		
- Text_Links_Buttons												
Containers_Boxes				Profit	By Ord	der_year	, Custom	er Class,F	roduct Li	ne		
			order_yea	r⇒ 2	800	2009	2010	2011	2012	2013	2014	Grand Total
Dials_Meter_Gauges		Customer Class	+ Product Lin	e + prof	it [sum]	profit [sum]	profit [sum]	profit [sum]	profit [sum]	profit [sum]	profit [sum]	profit [sum]
		Corporation	Copying Stu	Iff	-10027	3135	5184	15476	-1175	-766	17409	29235
			Office Stuff		10835	23577	4124		16448	18271	21454	95582
			Paper Stuff		16761	21627	18667	15047	7431	-1806	11005	88731
			Printing Stu		1869	24149	29054	3808	11952	9564	26411	106808
			Writing Stu	ff	6774	5030			3230	7287	9517	
		Total: Corporation			26213	77518			37886	32549	85796	
		Family	Copying Stu		3276	2766	2112		-1752	-7987	3306	3383
			Office Stuff		1840	1464	14371		13313	7394	1346	42926
			Paper Stuff		6307	10613			-3691	10893	3293	49934
			Printing Stu		-7487	6203	6335		1088	8522	4618	29218
			Writing Stu	ff	-248	-392	-972		3576	8369		24720
		Total: Family	Operation of the		3688	20654	42967		12534	27190	12256	
		Hospital	Copying Stu Office Stuff		4666 789	3411	-2498		4000 -13398	7495 10189	5365 -663	30951 30624
- -			Paper Stuff		-10522	25544 1823	9036 10659		-13398 6852	15236	-003	53605
			-		994	7836	6155		2418	15236	7569	38789
			Printing Stu Writing Stu		994 4799	7836 9209	7256		2418 12741	9712		
		Total: Hospital	wriding Stu		725	47823			12/41	57568	43789	
		School	Copying Stu	ff	1944	47023			4810	1841	3033	16525
		0 001001	Office Stuff		1220	1953	2474		16312	6751	587	33438
			Paper Stuff		611	4279	-107	1912	21447	2883	-84	30942

Add Sunburst diagram to the dashboard

- 1. Go back to the Visualizer
- 2. Follow the steps to produce the sunburst diagram

3.

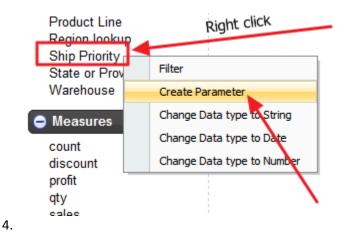


4. Add it to the dashboard

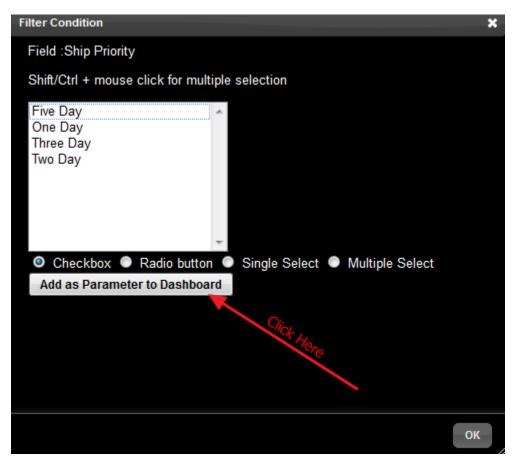
Add filter to the dashboard

Once all your four widgets are added to the dashboard, we will add a parameter/filter to make it more interactive.

- 1. Go back to the Visualizer
- 2. Right click on "Ship Priority"
- 3. Select "Create Parameter"



5. It will show the following filter dialog

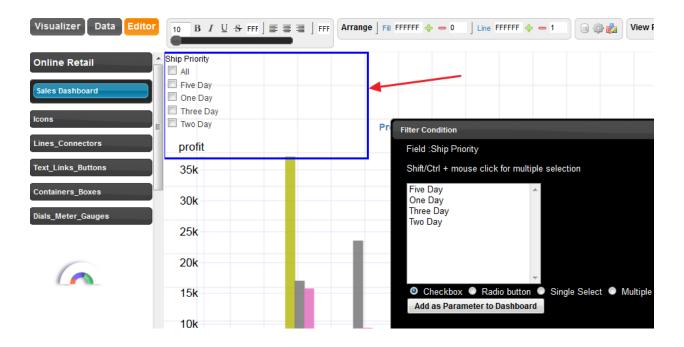


- 6.
- 7. You can select the type of parameter and the options are "Checkbox", "Radio Button", "Single select" dropdown, "Multi select " combobox.
- 8. We will keep the default selection of "Checkbox"

9. Click on "Add as Parameter to Dashboard"

10. The parameter is added to the dashboard as shown below

11.



- 12. As seen, the parameter is vertically oriented.
- 13. Close the parameter/Filter dialog box
- 14. Right click on the new checkbox anywhere within the blue border

All	
Five Day	(-) Vert Cell Spacing
One Day	(+) Vert Cell Spacing
Three Day	(-) Horiz Cell Spacing
	(+) Horiz Cell Spacing
profit	Vertical Orientation
35k	Horizontal Orientation
201	Edit Properties
30k	Object ID
25k	Image
	Duplicate

- 16. Select "Horizontal Orientation"
- 17. Drag the blue border to make room for horizontal placement so that all checkboxes are in same row

Ship Pri	ority			
🔲 AII 🛙	Five Day	One Day	Three D	ay 🔲 Two Day

We added the checkbox parameter, similarly we can add as many parameters to the dashboard if needed.

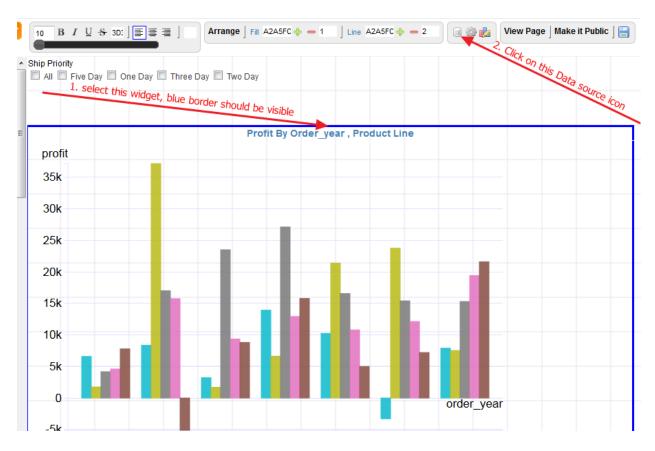
Next we will see how to connect the parameter to the widgets.

NOTE: Connecting the parameters to the widgets is needed for any database type connection. If you used CSV file upload to create a packaged dashboard with data inside then you don't need the linking. They are automatically linked for packaged dashboard.

Link Parameter to the widgets

The manual linking of parameters has some benefits such that you can choose which widgets will respond to the user selections.

In the following steps we will link the "Ship Priority" to just the top two widgets such as the "Group bar chart" and the "Circle pack"



1. Select the bar chart widget, note the blue border is showing to confirm it is selected

2. Click on the "Data source" icon

3. It shows the SQL as below

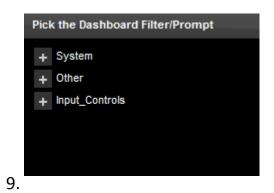
Data Source for pivot_grid_d2	
Connection excel - infocaptor_online_retail	
SQL Javascript Connection/Service	
Show Filters/Prompts Show Tables	
<pre>select "Product Line" as rd_0 , "order_year" as cd_0 , a from [transactions\$]</pre>	31
group by "Product Line", "order year"	
order by "Product Line" , "order_year"	

4. Just before the group statement in the SQL, press enter and type the following condition

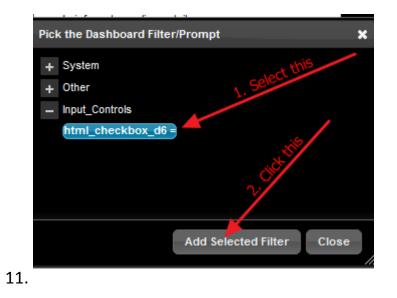
	tion excel - infocaptor_online_retail
SQL	Javascript Connection/Service
	Show Filters/Prompts Show Tables
fi Wh gi	elect "Product Line" as rd_0 , "order_year" as cd_0 , so rom [transactions\$] here "Ship Priority" in () roup by "Product Line" , "order_year" rder by "Product Line" , "order_year"

6. where "Ship Priority" in ()

- 7. Bring your cursor within the brackets
- 8. Click on the "Show Filter Prompts"



10. Expand "Input_Controls"



- 12. Select the "html_checkbox_d6"
- 13. Click on the "Add Selected Filter" button

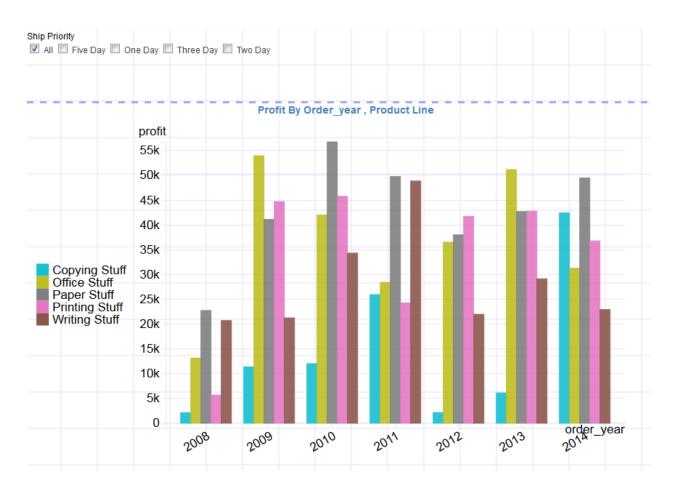
14. This action will add the filter values between the brackets where your cursor is. If your cursor was somewhere else, then just copy the new text and place it between the brackets

connect	0.001-1000	aptor_onnito_rotan
SQL	Javascript	Connection/Service
	Show Filters/Pro	ompts Show Tables
		ct Line" as rd_0 , "order_year" as cd_0 , si
wh		riority" in (param <html_checkbox_d6>) duct_Line" , "order_year"</html_checkbox_d6>
or	der by "Prod	duct Line" , "order_year"
		E. ∢
5.		

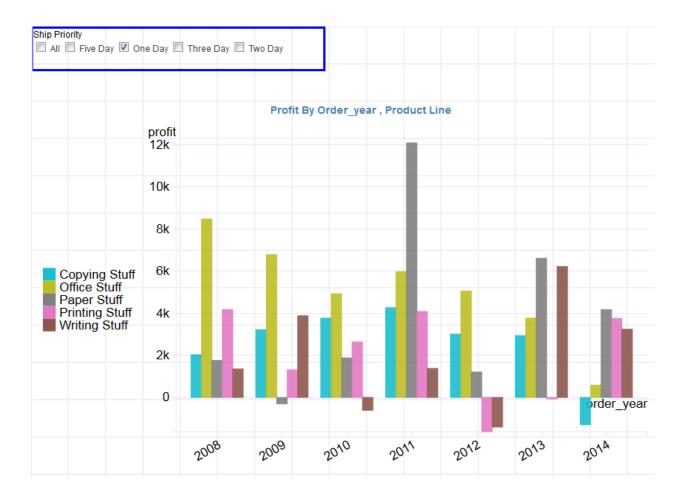
- 16. Final where condition { where "Ship Priority" in (param<html_checkbox_d6>) }
- 16. Click OK and close the "Data Source" window

Test the interaction for the filter selection

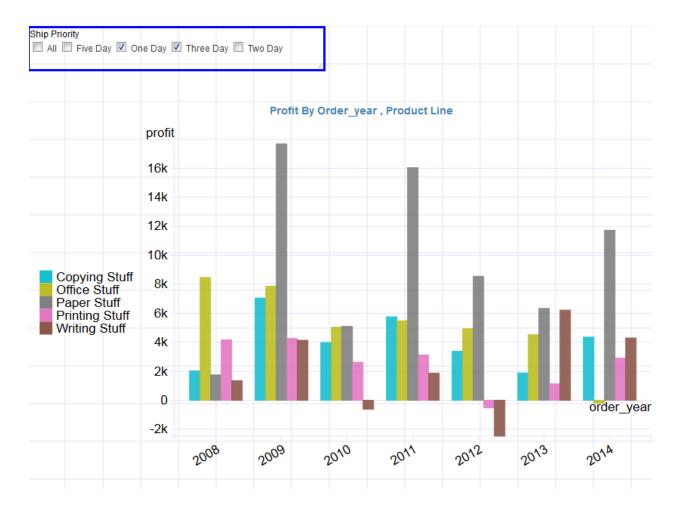
1. Select "ALL"



2. De-Select "All" and select "One Day"



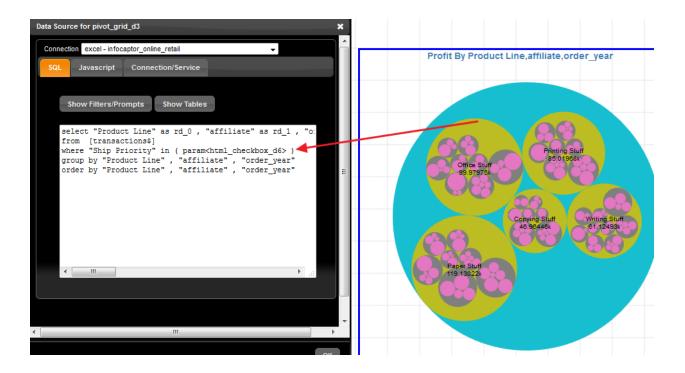
3. Select "Three Day" as well



As you notice the chart has now become interactive and responds to the parameter selections.

We repeat the process for the Circle pack widget and make it interactive as well. For the circle pack we can simply copy the where condition and paste it in the SQL

where "Ship Priority" in (param<html_checkbox_d6>)



Click OK and now we are done.

We will keep the pivot table and the sunburst without linking to the parameter.

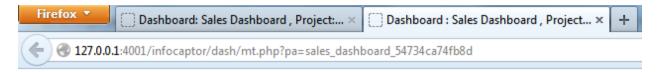
Now when you change the parameter selection both widgets respond accordingly.

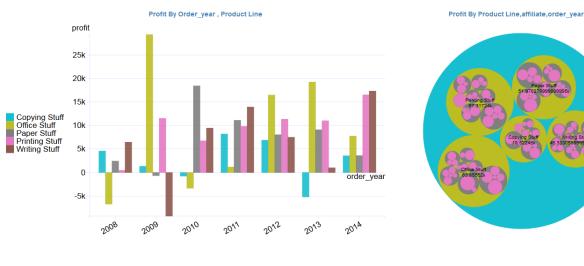
Publishing the Dashboard

Once we are done adding all the four analysis and the dashboard parameter/filter, we can save the dashboard and then click on "View this Page"



Once you click on "View Page", it will open as independent URL





Profit By Order_year , Customer Class,Product Line 2010 2012 2014 2008 2009 2011 2013 order year profit [sum] profit [sum] profit [sum] profit [sum] profit [sum] profit [sum] Customer Class + Product Line 5184 15476 17409 Corporation Copying Stuff 3135 Office Stuff 1083

Profit By Affiliate



Ship Priority

All 🗹 Five Day 🗐 One Day 🗐 Three Day 🗐 Two Day

This dashboard is only viewable by you or the person who has developed it. In order to have others view the dashboard and interact with it you need to share the dashboard.

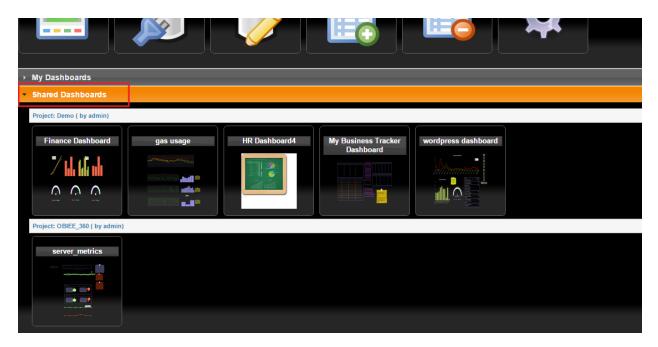
There are two ways you can share your dashboard.

- 1. Private Sharing
- 2. Public Sharing

1. Private Sharing:

You can share the dashboard privately to a single user or a group of users. When you share the dashboard privately, the users can view the dashboard only when they login into InfoCaptor.

For e.g. When you share the dashboard and when the user logins, they will see the following screen upon login



There are two sections "My Dashboards" and "Shared Dashboards"

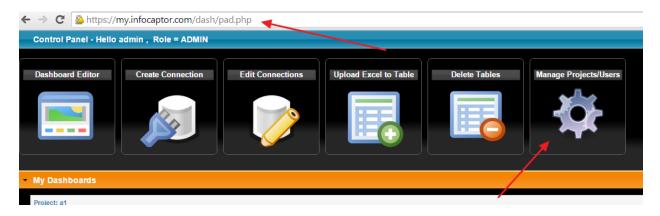
Any dashboards that you develop will be visible under the "My Dashboards" section.

If someone shares the dashboard with you then it will be available under the "Shared Dashboards" section

Share a page directly to the user

You need to navigate to the "Manage Project/Users" page.

This can be done two ways. When you login, you will see a launchpad like below

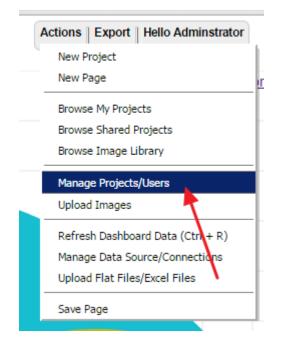


And you will see the big icon "Manage Projects/Users"

Click on that.

Alternatively, if you are in the Dashboard Editor, then navigate as

Actions >> Manage Projects/Users



You should see something similar

< →	C https://my.infocaptor.com/dash	n/dashboard.php				
Hello ad	min			_		
Projec	ct Details Group Details Page Details Gal	lery Database Connections	Flat Files/Tables			
My P	rojects <u>Export to Excel</u> 3				•	
	Project Code 🖕	Pro	oject Name	Status	Pub	
+	a1_542458fad32ae	a1		Active	No	
+	colorado_school_50e44d1e0753f	Colorado school	Active	No		
+	demo_4faaddb2eabf8	Demo	Active	No		
+	demo_2014_543bf9d19d1d8	Demo 2014	Active	No		
+	mayors_dashboardboston_539dad3bbcf57	Mayors Dashboard - Boston	layors Dashboard - Boston			
+	my_images_4faa7b58512c2	MY_IMAGES	Active	No		
+	obiee_360_5154b68c41436	OBIEE_360	Active	No		
+	private_502a72f2905c5	Private		Active	No	
+	project1_4f70fc3b0aeee	project1		Active	No	
		·			÷	
+	γ φ φ 🔫	Page 1 of 1 ->> ->- 15	•	View 1	- 9 of 9	
Add	I selected Project to Group					
Sho	w all Groups containing my projects					

There are multiple tabs, Projects, Groups, Pages and other things.

Jump to the "Page Details"

roje	ct Details	Group Details Pa	<mark>age Details Gallery Data</mark>	base Connections	Flat	Files/Tables			
My P	Pages <u>Ex</u> r	port to Excel							9
		Page Code	Page Name	Status	Public	Project Code	Project Name	Status	Pub
+	rename_	new_542458fad3dee	Rename New	Active	No	a1_542458fad32ae	a1	Active	No
+	rename_	new_50e44d1e3a97c	Rename New	Active	No	colorado_school_50e44d1e0753	Colorado school	Active	No
+	bloombe	rg_dashboard_5127f636	Ebloomberg_dashboard	Active	No	demo_4faaddb2eabf8	Demo	Active	No
+	chalkboa	rd_503ce869d765e	chalkboard	Active	No	demo_4faaddb2eabf8	Demo	Active	No
+	dashboa	rd_browser_512d444e5	Dashboard browser	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	database	support_4fb1b1081e9	adatabase support	Active	No	demo_4faaddb2eabf8	Demo	Active	No
+	date_rem	hinder_dashboard_4faff1	1 Date Reminder Dashboard	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	dash1_5	07805f546823	date_time	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	electric_s	sales_revenue_by_state	Electric Sales Revenue by sta	te Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	faculty_ti	me_spent_distribution_5	5 Faculty_time_spent_distribution	on Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	finance_o	dashboard_4fb0659a8a	Finance Dashboard	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
÷	flat_file_5	5123d054af708	flat-file	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	gas_usag	ge_50ddbb83c08ec	das usage flat_file_5123d054af708	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	google_p		Google Position Dashboard	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	hr_dashb	00ard1_503a9967292c7	HR Dashboard1	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
•									
1	ې م				1 of 8	i ⊳> ⊨i <u>15 ▼</u>		√iew 1 - 1	5 of 10

You can click on the search icon to look for your page. If you see your page, then just click on it once so that it is highlighted.

In this example, we selected the "bloomberg dashboard"

← → iello ad		ptor.com/dash/dashboard.ph	р					
Projec	ct Details Group Details Pa	ge Details Gallery Database Co	onnections	s Flat I	Files/Tables			
My Pa	ages Export to Excel							•
	Page Code	Page Name	Status	Public	Project Code	Project Name	Status	Public
+	rename_new_542458fad3dee	Rename New	Active	No	a1_542458fad32ae	a1	Active	No
+	rename_new_50e44d1e3a97c	Rename New L Click to S	Active	No	colorado_school_50e44d1e0753	Colorado school	Active	No
+	bloomberg_dashboard_5127f636	bloomberg_dashboard	Active	No	demo_4faaddb2eabf8	Demo	Active	No
+	chalkboard_503ce869d765e	chalkboard	Active	No	demo_4faaddb2eabf8	Demo	Active	No
+	dashboard_browser_512d444e5	Dashboard browser	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	database_support_4fb1b1081e9a	database support	Active	No	demo_4faaddb2eabf8	Demo	Active	No
+	date_reminder_dashboard_4faff1	Date Reminder Dashboard	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	dash1_507805f546823	date_time	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	electric_sales_revenue_by_state	Electric Sales Revenue by state	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	faculty_time_spent_distribution_5	Faculty_time_spent_distribution	Activa	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	finance_dashboard_4fb0659a8a7	Finance Dashboard	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	flat_file_5123d054af708	flat-file	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	gas_usage_50ddbb83c08ec	gas usage	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	google_position_dashboard_4fac	Google Position Dashboard	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
+	hr_dashboard1_503a9967292c7	HR Dashboard1	Active	Yes	demo_4faaddb2eabf8	Demo	Active	No
•				_				•
Sha	P © re selected page with users	i⊲ h groups. Direct sharing of pages to indivic	Page		►> ►I 15 ▼ mended and should be used sparingly		View 1 - 1	5 of 108

When you click on "Share selected page with users"

It opens this dialog

bloomberg_dashboard_5127f636 bloomberg_dashboard Active No ÷ No + chalkboard_503ce869d765e chalkboard Active Share the page with users × Ye + da Active jason p No dat Active + bjethwa mzubin Ye dat Active + Ye + da Active Active Ye + ele Ye + fac Active ок Ye + fina Active flat_file_5123d054af708 flat-file Active Ye

We provide the user id (login name) for each user we intend to share the dashboard with.

Each user is entered in a separate line

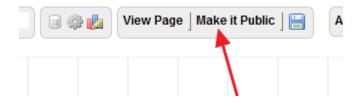
Click OK and you should see a confirmation.

When these individual users login or browse the shared dashboards, they will see new entries in their list.

2. Public Sharing

Public sharing is one click job. In your dashboard editor, you will see the link 'Make it Public" on the top toolbar

How to build Dashboards - How to create Excel dashboard



Click on it once and now you can share your dashboard by just passing the URL with anybody in your company or network. Making it public simply means that the users don't need to login to view the dashboard. They can still fully interact with the dashboard.