

# ASSIGNMENT-1

DATA ANALYTICS WITH IBM COGNOS

NAME: K.LAKSHMI TULASI

REG NO:21BCE8033

Splitting date into month, date,year

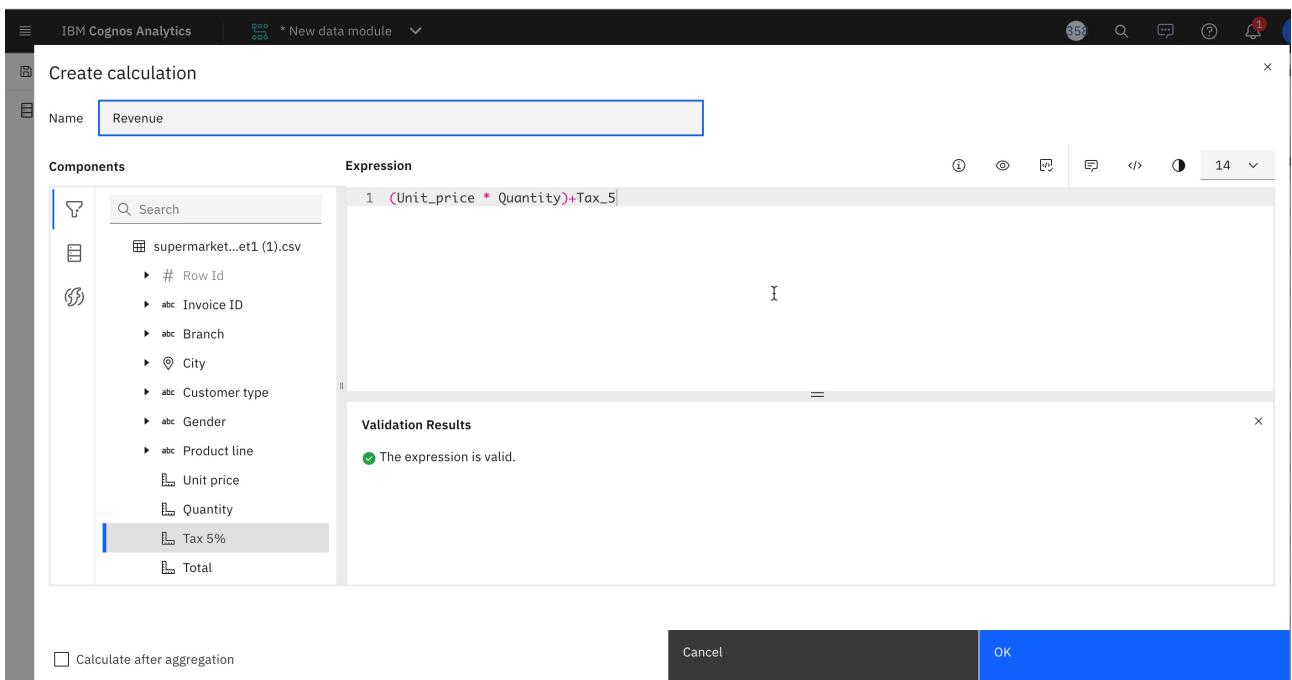
The screenshot shows the 'Split column - Date' dialog box in IBM Cognos Analytics. The 'Year' field is set to 2019, 'Month' to 1, and 'Day' to 5. The 'Include the day of the week' checkbox is checked. The 'Preview' section shows a table with columns: Date, Year, Month, Day, and Day of the week. The data in the preview table is as follows:

Date	Year	Month	Day	Day of the week
2019-01-05	2019	1	5	Saturday
2019-02-06	2019	2	6	Wednesday
2019-03-29	2019	3	29	Friday
2019-03-11	2019	3	11	Monday
2019-03-22	2019	3	22	Friday
2019-02-10	2019	2	10	Sunday
2019-03-27	2019	3	27	Wednesday
2019-03-12	2019	3	12	Tuesday
2019-02-14	2019	2	14	Thursday
2019-01-24	2019	1	24	Thursday

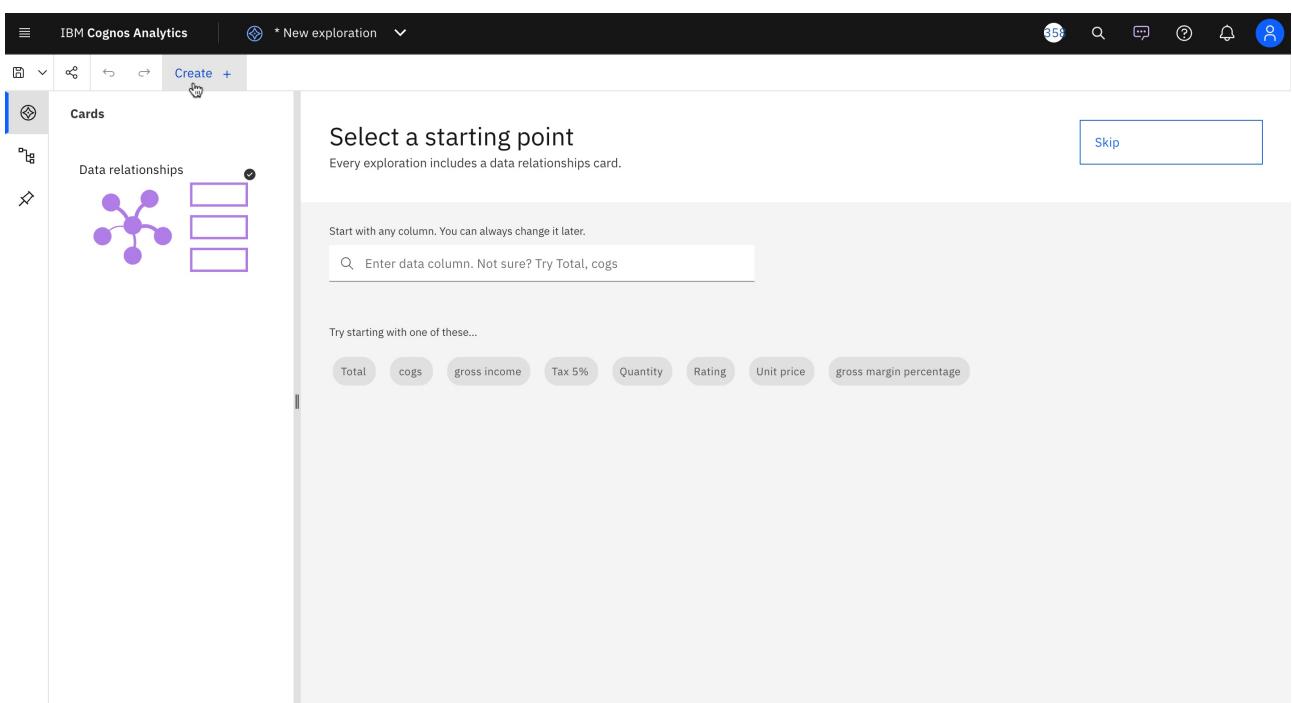
Creating a data module:

The screenshot shows the 'Add a data source to explore' dialog box in IBM Cognos Analytics. The 'Team content' tab is selected, showing a list of existing data modules: 'assign data module' and 'New data module'. The 'assign data module' entry is highlighted. The 'Data module' sidebar on the left shows various data sources and navigation paths.

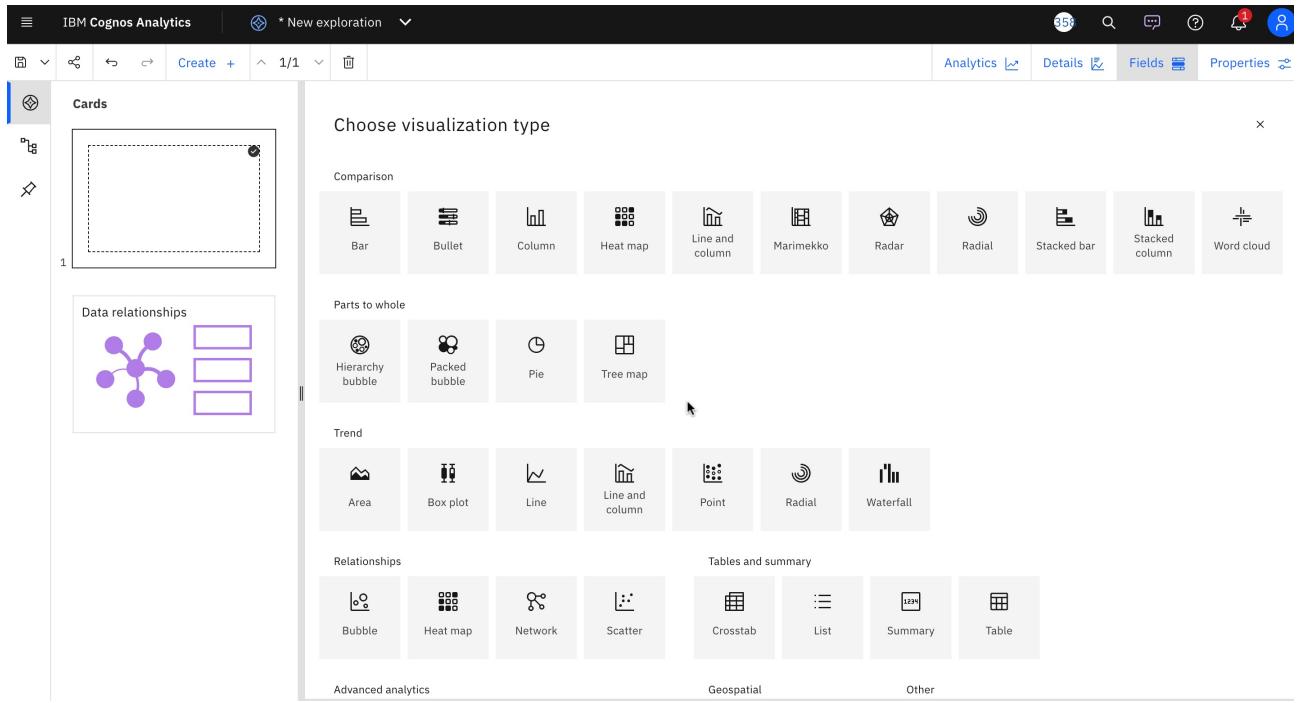
Creating revenue column:



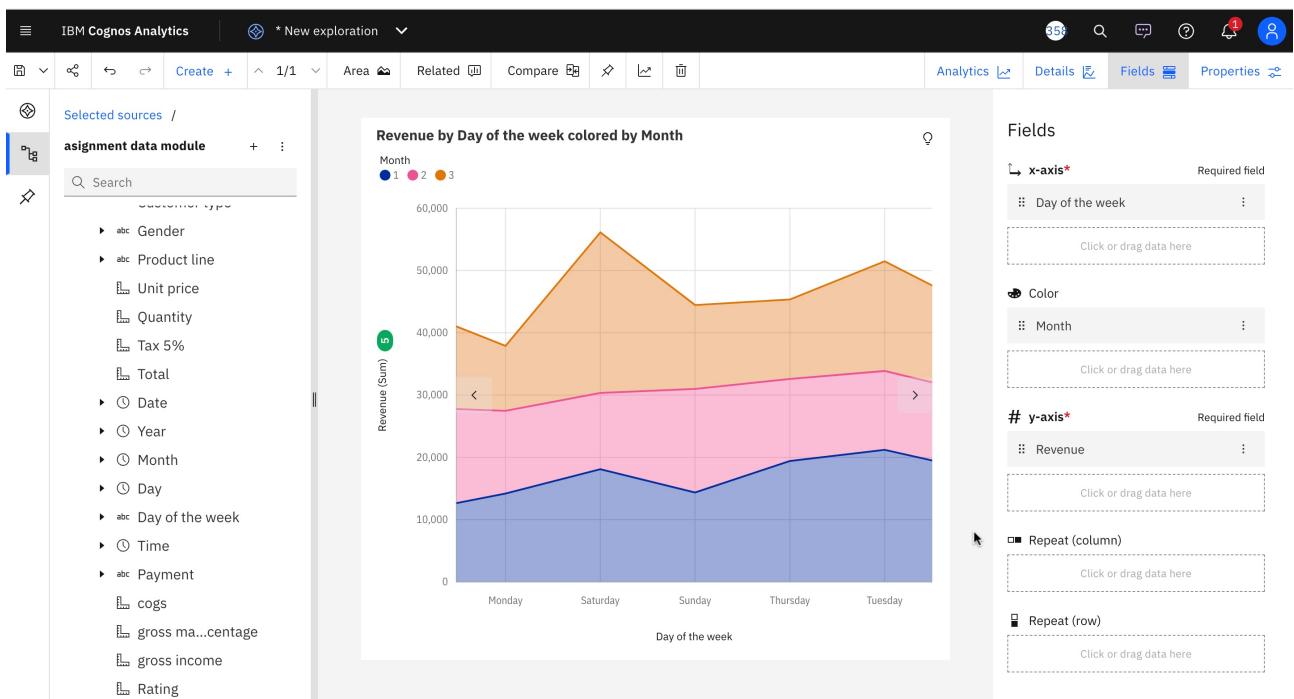
## Creating visualizations:



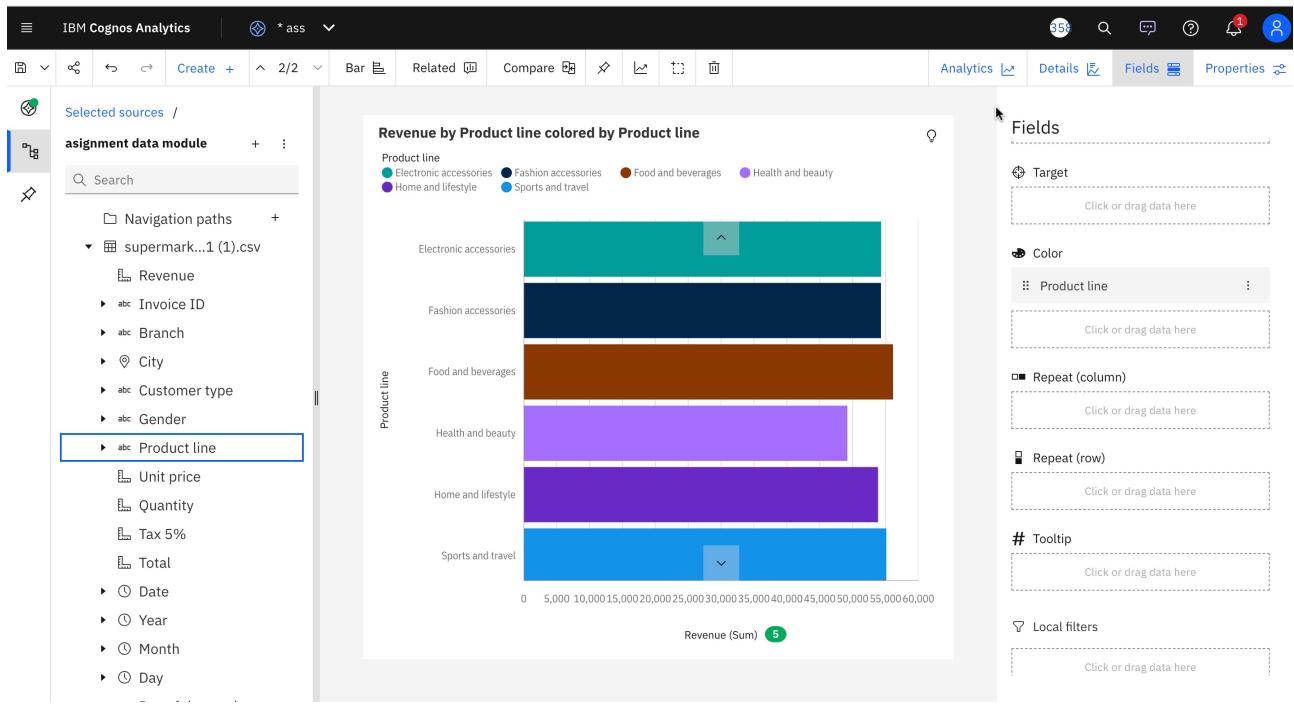
Selecting the visualization we want to create:



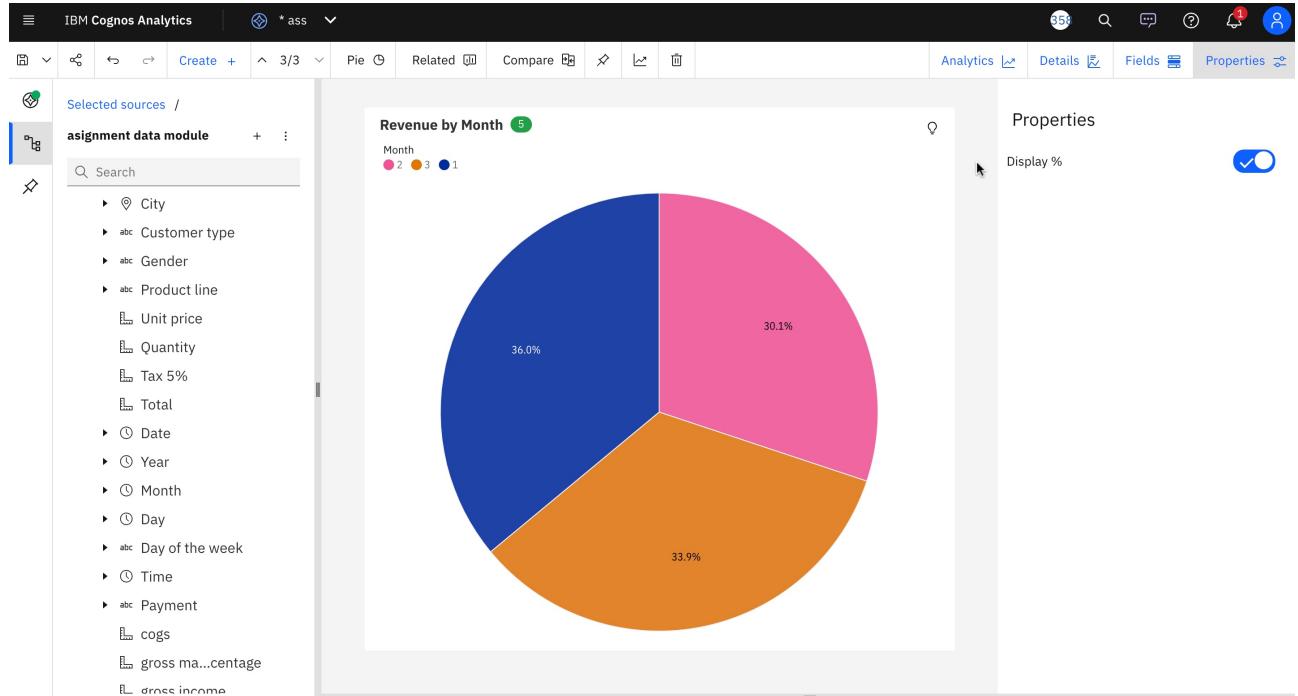
## Area visualization(revenue by day of the week colored by month):



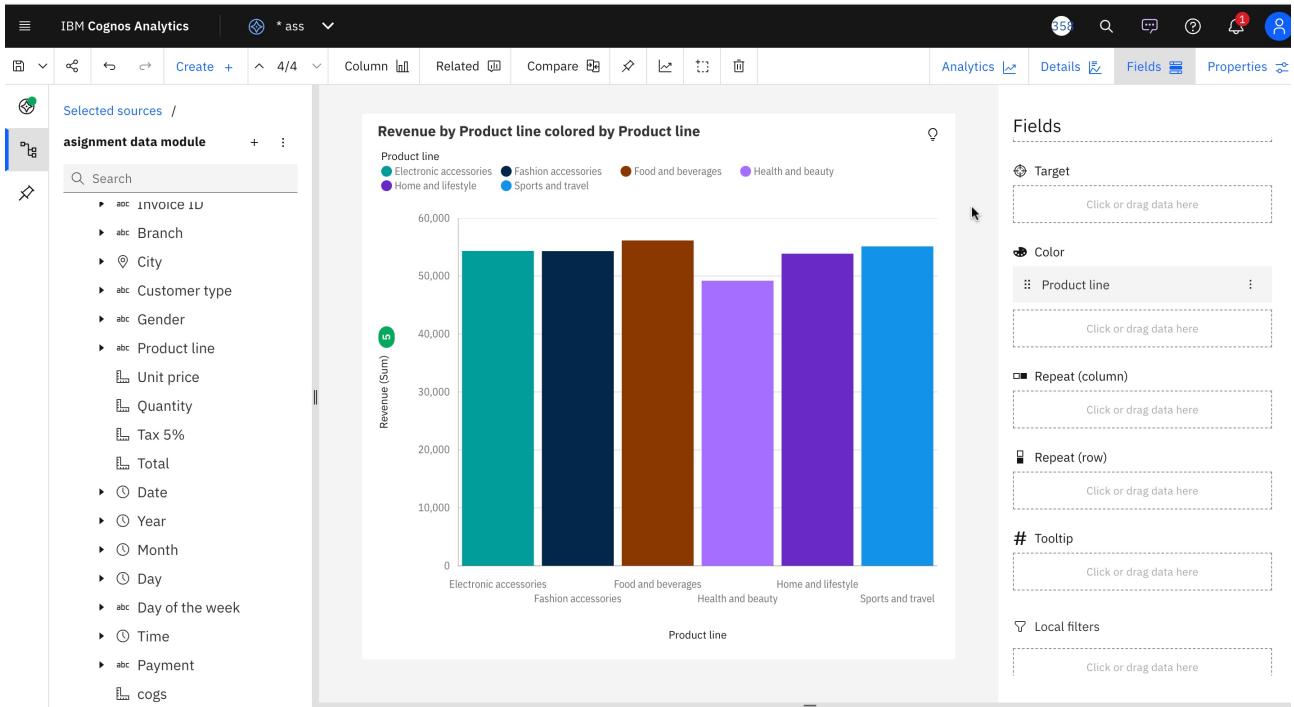
## bar visualization(revenue by product line coloured by product line)



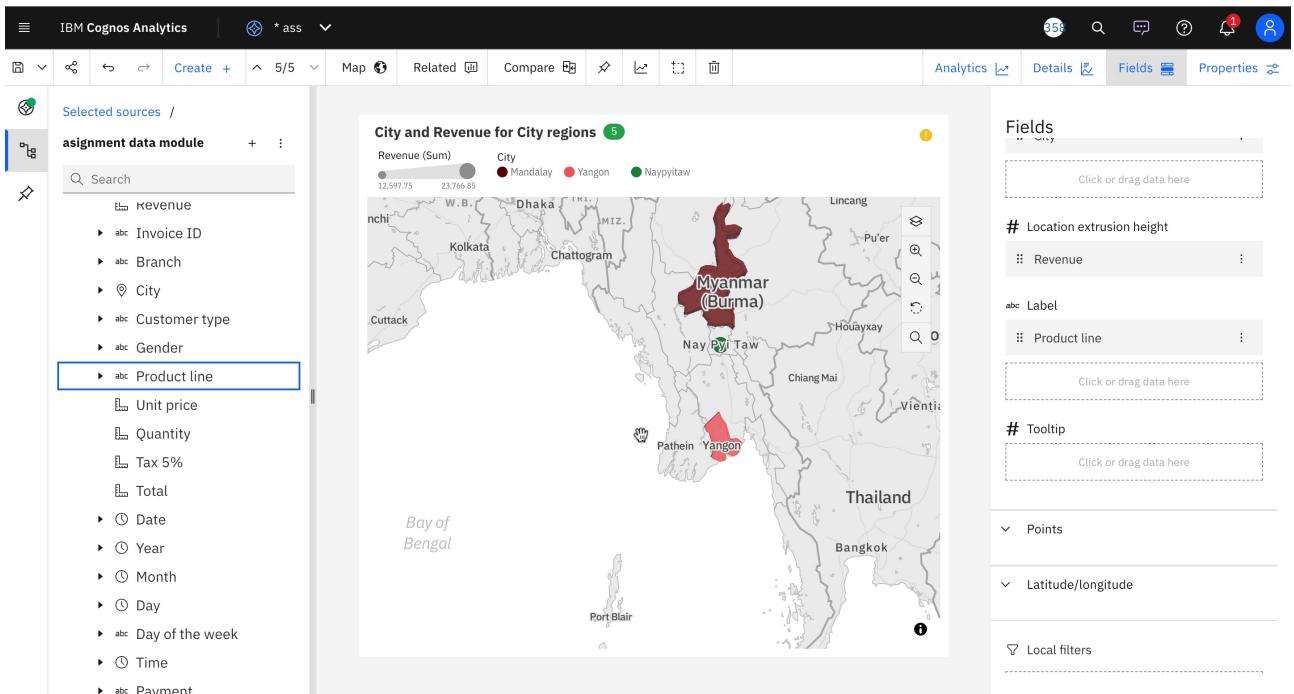
## Pie visualization(Revenue by month)



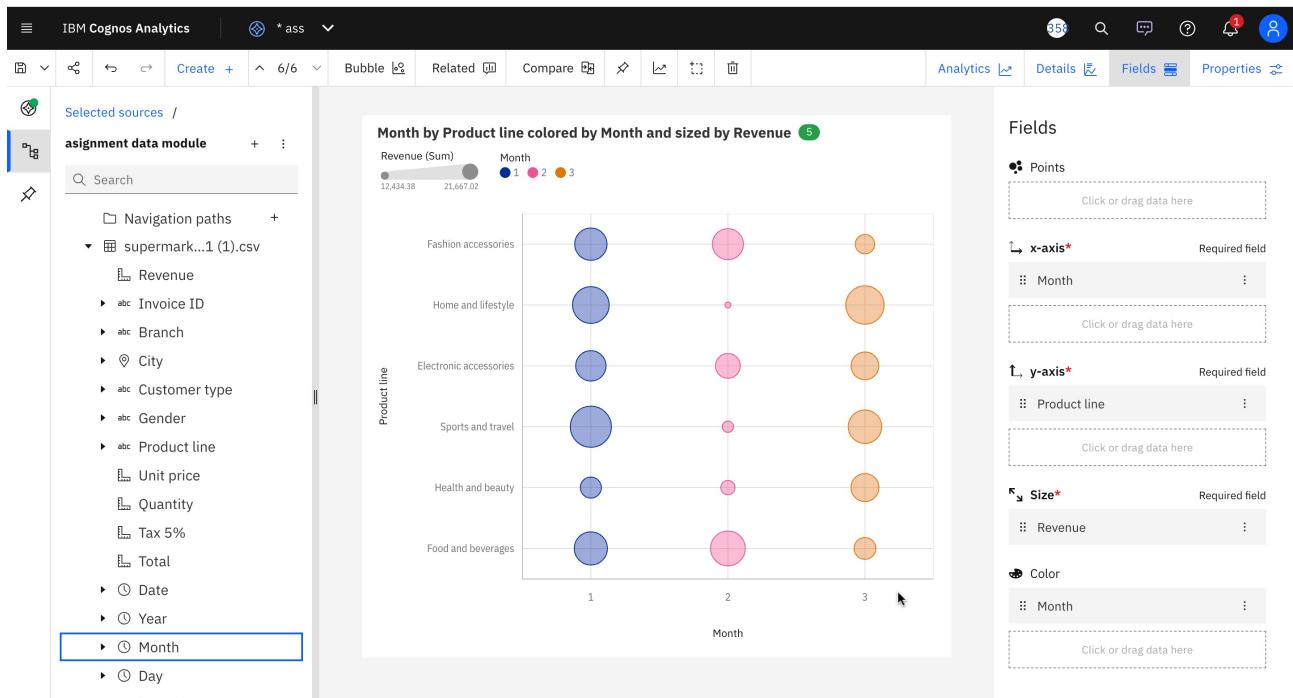
## Column visualization(revenue by product line colored by product line)



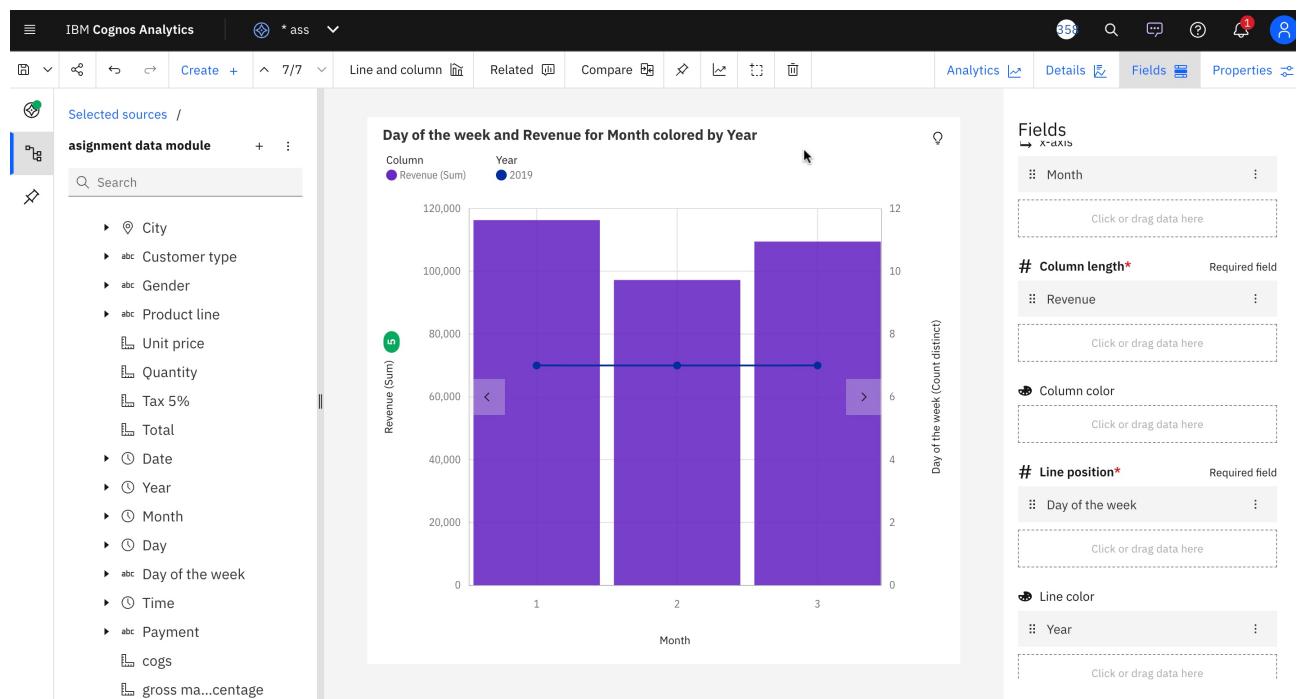
## map visualization(city and revenue for city regions)



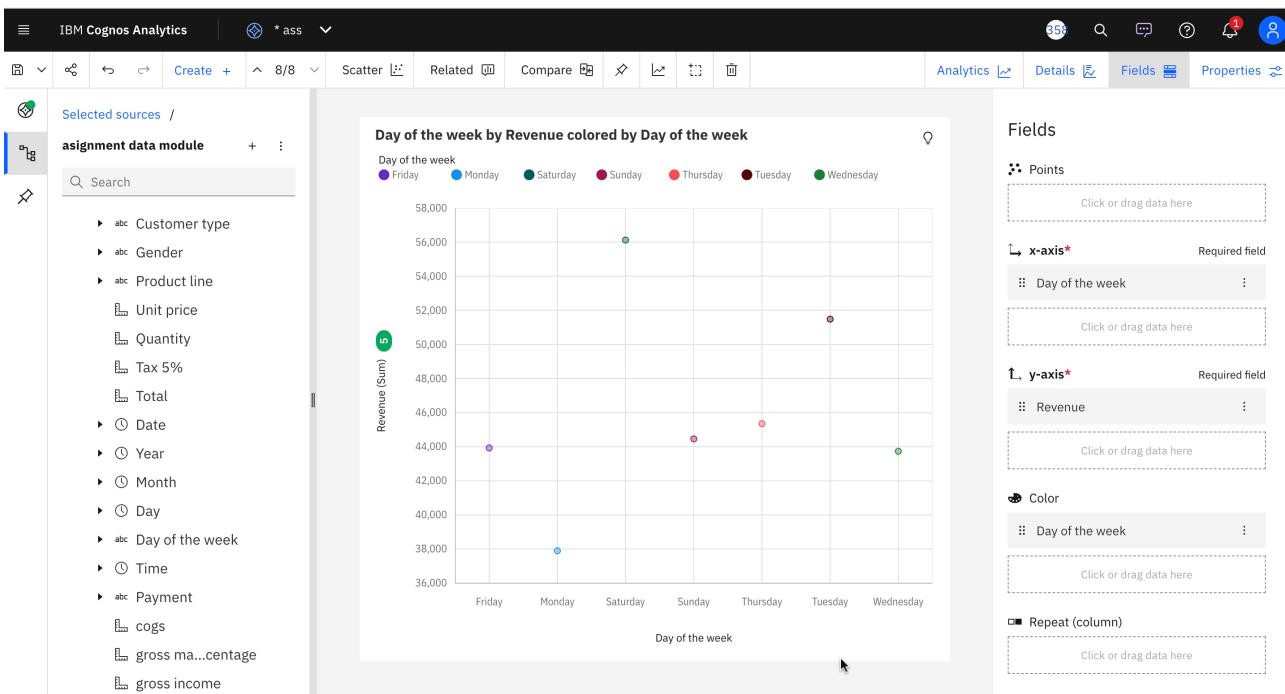
## Bubble visualization(Month by Product line colored by Month and sized by Revenue)



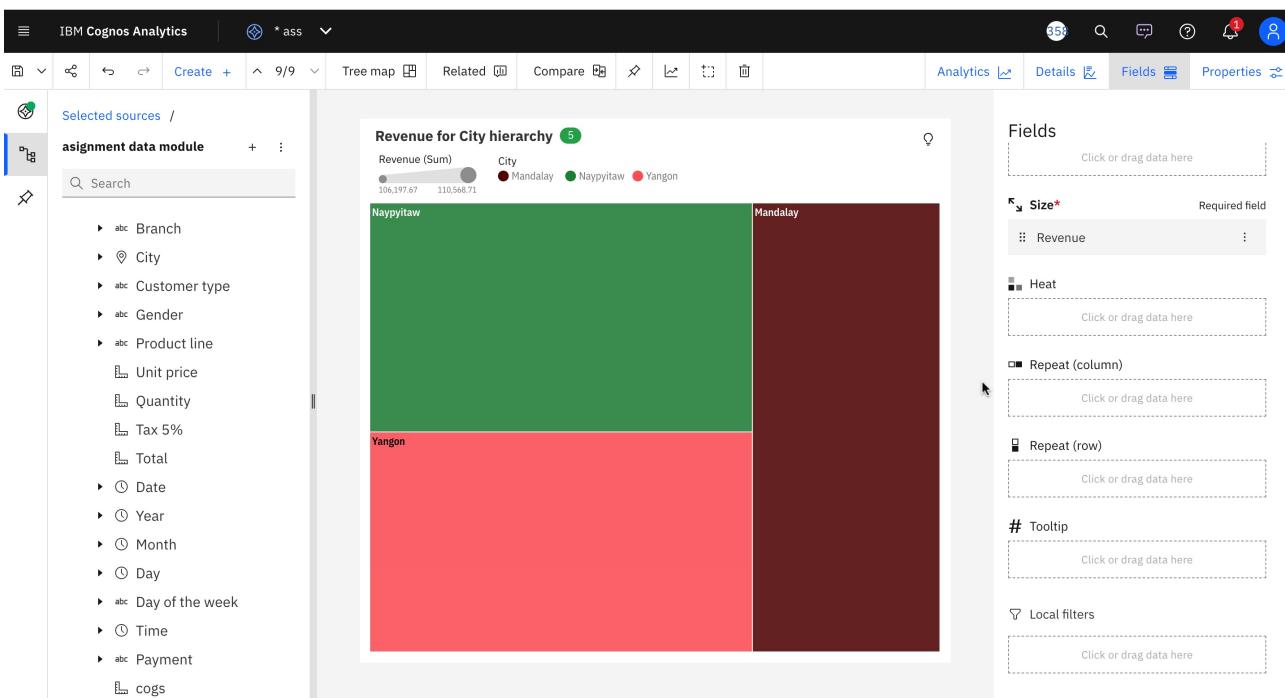
## Line and column visualization (Day of the week and Revenue for Month colored by Year)



## Scatter visualization(Day of the week by Revenue colored by Day of the week)



## Tree visualization(Revenue for City hierarchy)



**crosstab(Revenue for Day of the week and City)**

IBM Cognos Analytics

Selected sources / assignment data module

Revenue for Day of the week and City

Revenue	Friday	Monday	Saturday	Sunday	Thurs
Mandalay	14,417.76	12,734.7	21,284.42	10,415.33	
Naypyitaw	14,964.72	10,925.31	18,070.97	17,035.75	
Yangon	14,543.87	14,239.06	16,765.41	17,006.82	
<b>Summary</b>	<b>43,926.34</b>	<b>37,899.08</b>	<b>56,120.81</b>	<b>44,457.89</b>	

Fields

- Columns: Day of the week
- Rows: City
- Values\*: Revenue
- Local filters

## Radial visualization(Revenue by Product line colored by Product line)

IBM Cognos Analytics

Selected sources / assignment data module

Revenue by Product line colored by Product line

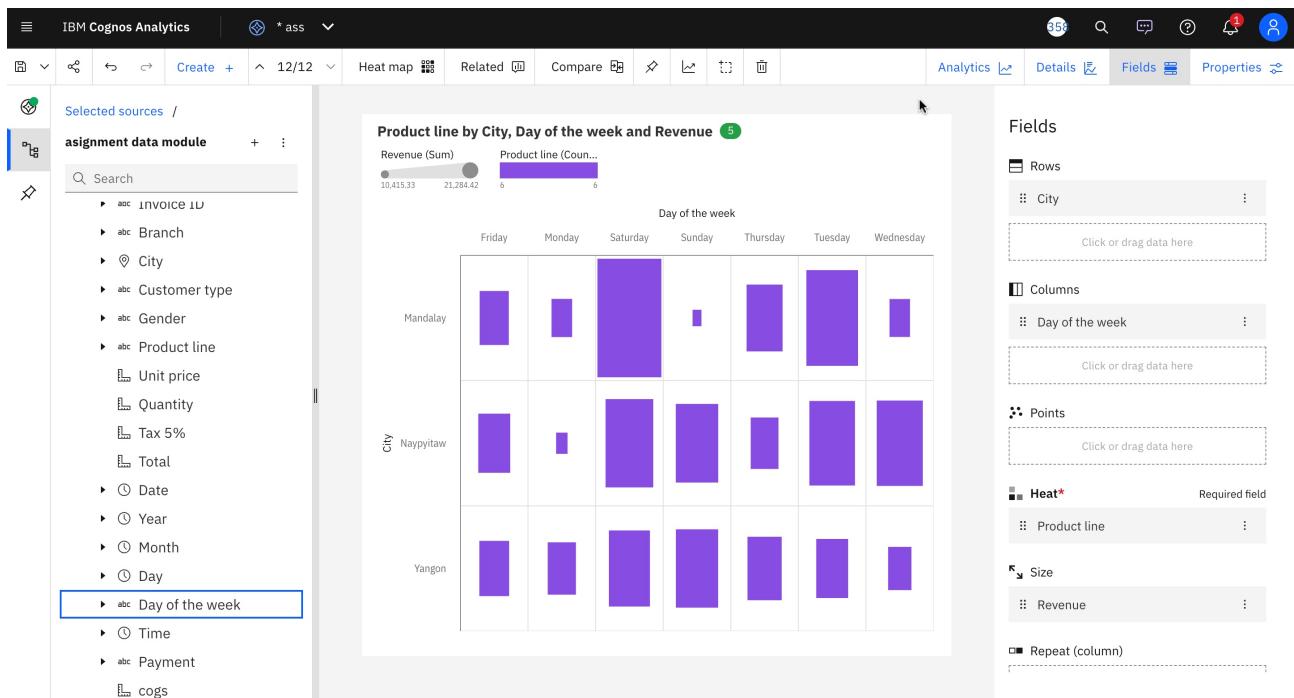
Product line

- Electronic accessories
- Fashion accessories
- Food and beverages
- Health and beauty
- Home and lifestyle
- Sports and travel

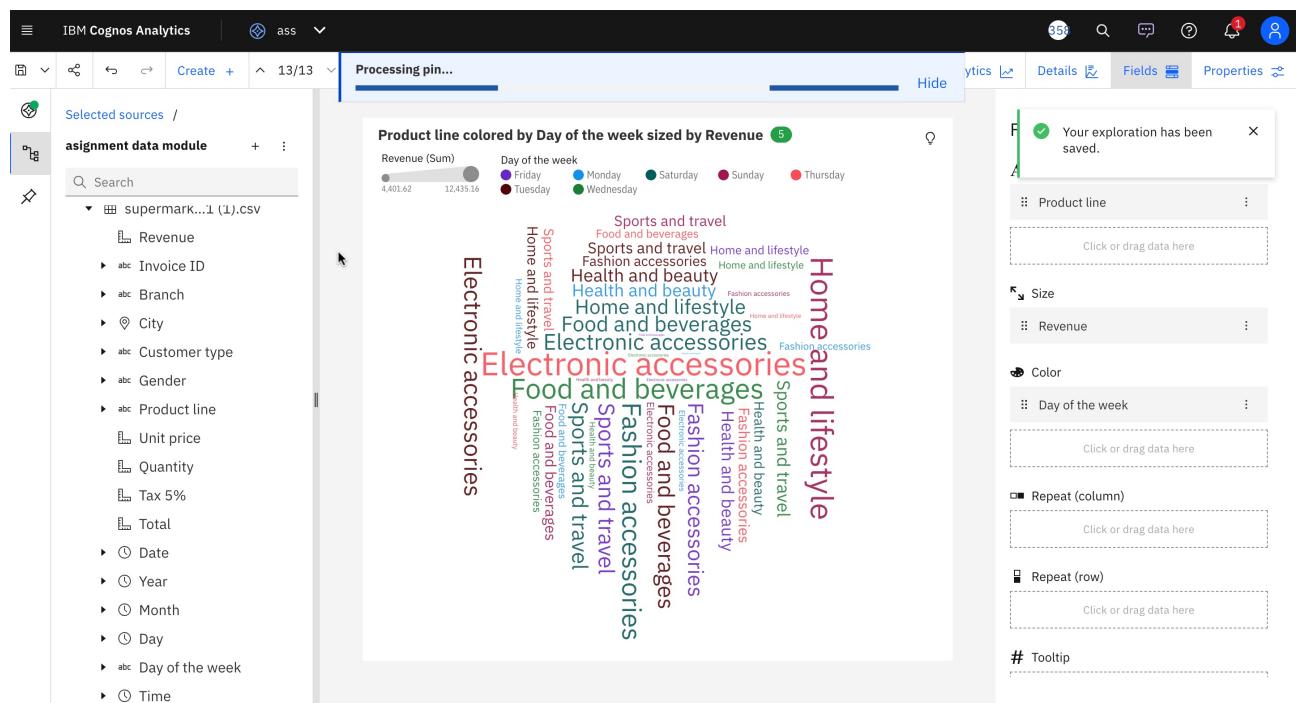
Fields

- Bars: Product line
- Length\*: Revenue
- Color: Product line
- Maximum value
- Repeat (column)
- Repeat (row)

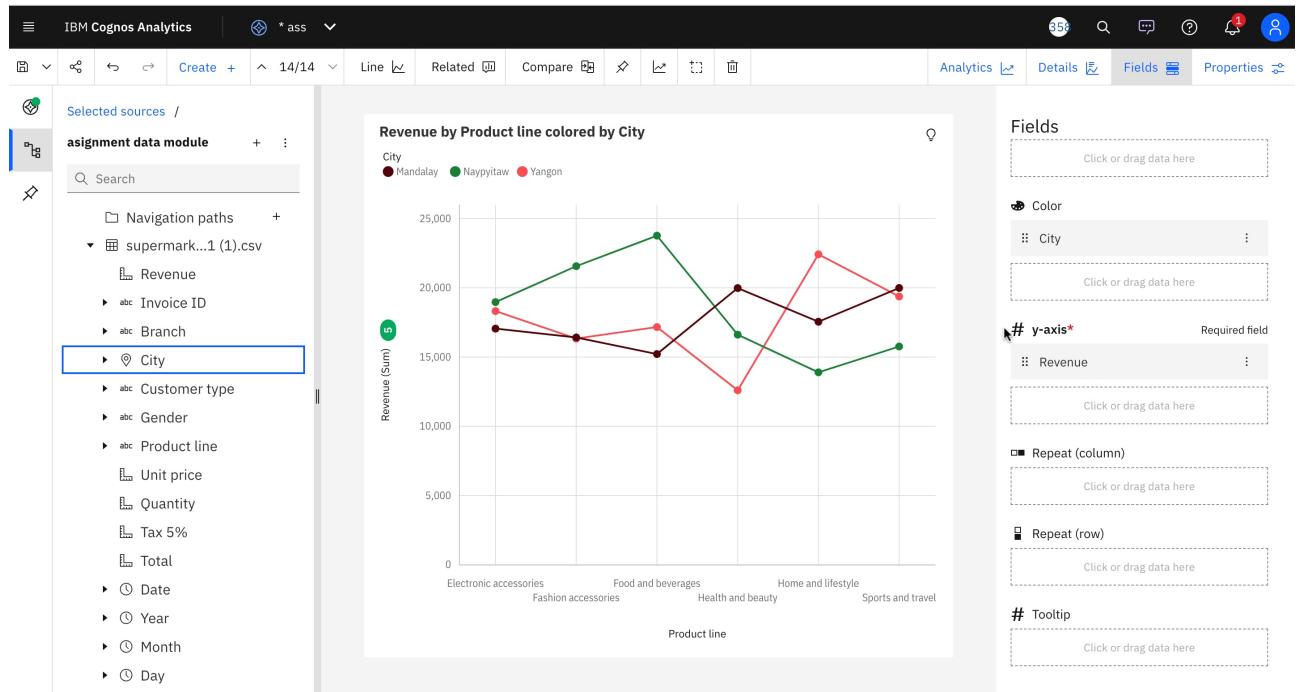
## Heat map visualization( Product line by City, Day of the week and Revenue)



## A word cloud visualization(Product line coloured by Day of the week sized by Revenue)



## Line visualization (Revenue by Product line colored by City)



## Deleting unnecessary columns

The screenshot shows a data grid with columns: Date, Year, Time, cogs, gross margin percentage, and gros. A context menu is open over the 'Time' column header, listing options such as 'Create data group...', 'Create navigation path...', 'Split...', 'Hide from users', 'Remove', 'Format data...', 'Clean...', 'Sort descending', 'Sort ascending', and 'Properties'.

Date	Year	Time	cogs	gross margin percentage	gros	
5	2019	13:08	522.83	4.76190476	26.1	
8	2019	10:29	76.4	4.76190476	3.82	
3	2019	13:23	324.31	4.76190476	16.2	
27	2019	20:33	465.76	4.76190476	23.2	
8	2019	10:37	604.17	4.76190476	30.2	
25	2019	18:30	597.73	4.76190476	29.8	
25	2019	14:36	413.04	4.76190476	20.6	
24	2019	11:38	735.6	4.76190476	36.7	
10	2019	17:15	Credit card	72.52	4.76190476	3.62
20	2019	13:27	Credit card	164.52	4.76190476	8.22
6	2019	18:07	Ewallet	57.92	4.76190476	2.89
9	2019	17:03	Cash	102.04	4.76190476	5.10
12	2019	10:25	Ewallet	234.75	4.76190476	11.7
7	2019	16:48	Ewallet	431.9	4.76190476	21.5