

NAME: Harendhar K

CAMPUS: Vellore

MENTOR: Uma Rani

PROJECT TITLE: Global Sales Data Analytics Using IBM Cognos

Respected Uma Mam:

I have created this Document file before you have said to do in required Syntax format and I asked you regarding this mam and you mentioned to upload the same Document which I created on my own. So please consider this Document mam.

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Project Description:

Shopping online is currently the need of the hour. Because of this COVID, it's not easy to walk in a store randomly and buy anything you want. So, try to understand a few things like, Customer Analysis and Product Analysis of this Global Super Store.

Architecture :



Solution Requirements



Project Objectives

- Know fundamental concepts and can work on IBM Cognos Analytics
- Gain a broad understanding of plotting different visualizations to provide suitable solution.
- Able to create meaningful Visualizations and Dashboard(s).

Project Flow

- Users create multiple analytical graphs/charts/Visualizations.
- Using the Analytical Visualizations, build required Dashboard(s).
- Saving and visualizing the final dashboard in the IBM Cognos Analytics.

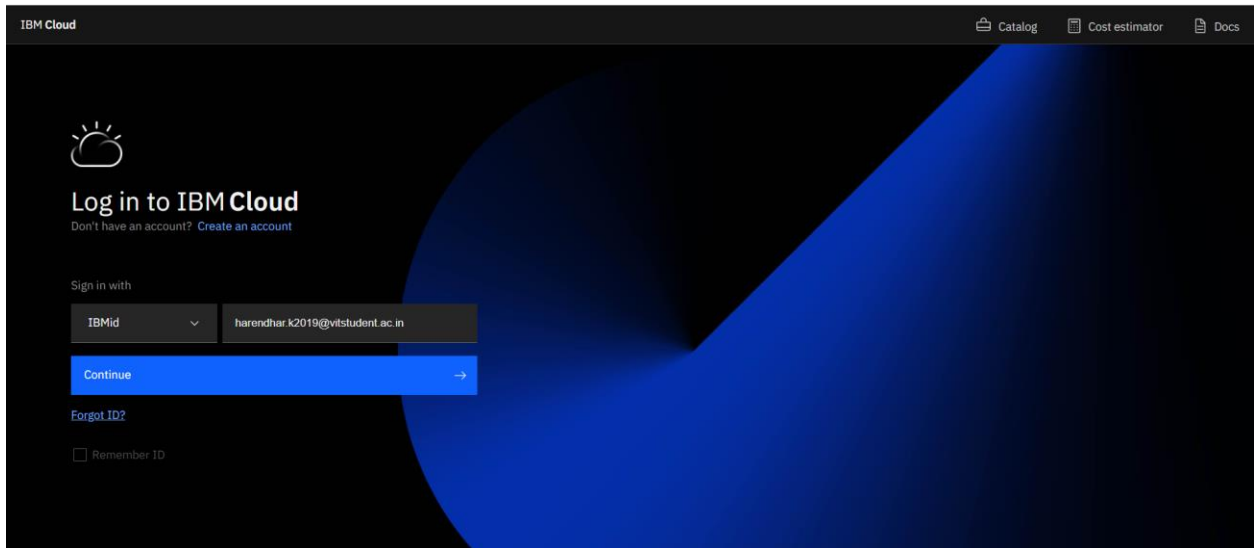
To accomplish this, we have to complete all the activities and tasks listed below:

- **IBM Cloud Account**

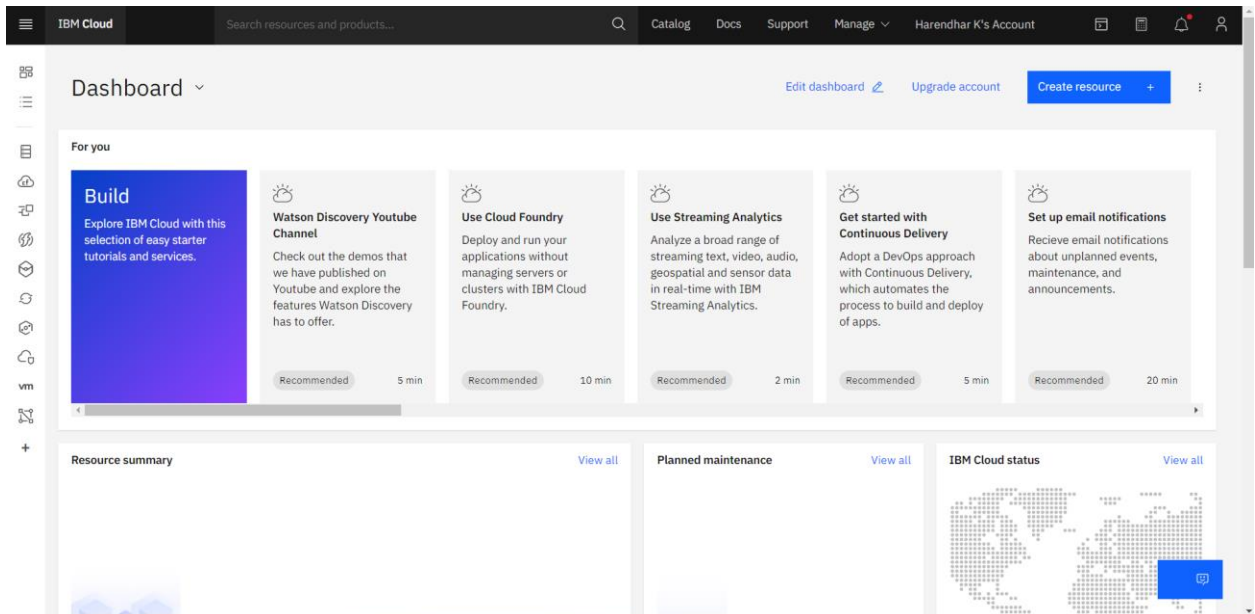
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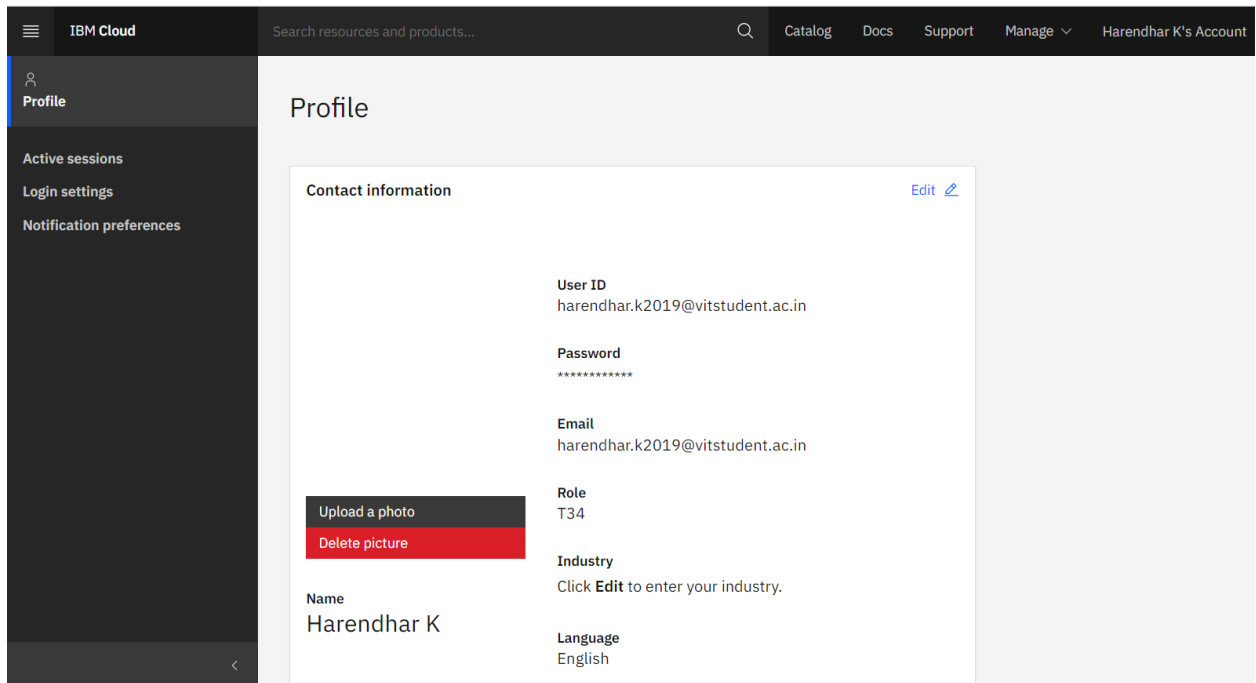
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Quick launch

- Upload data**
Upload or drag and drop spreadsheets, csv files, and other data sources.
- Prepare data**
Use data modules to clean and connect data from multiple resources.
- Exploration**
Quickly find unbiased answers by identifying trends in your data with data exploration.
- Present data**
Create sophisticated, multi-page, multi-query dashboards, reports, or stories.

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Addresses

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Password

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TOTP Authenticator app
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Harendhar K
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Working with Dataset

Understand the Dataset

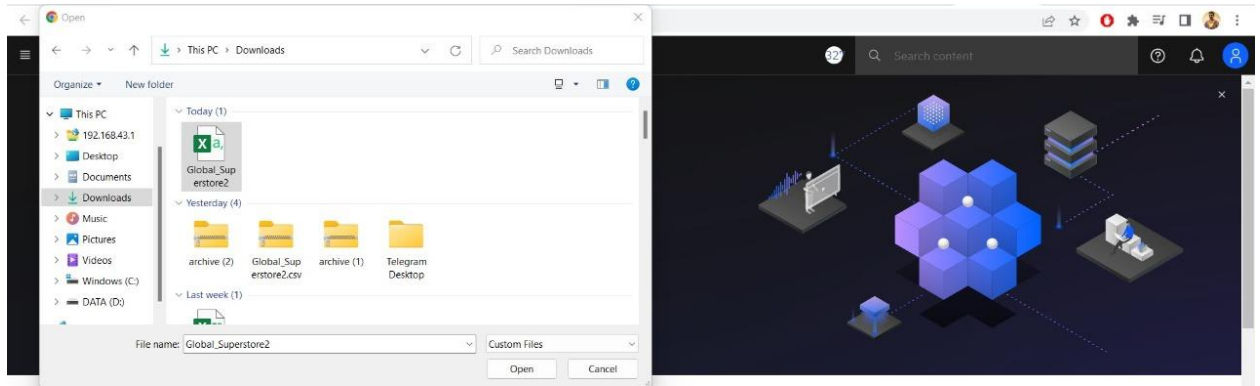
Once you download the dataset, the rows you see are the details of the order done online by people across the globe in the time frame 1-jan-2011 to 31-dec-2014. There are no missing values in the majority of columns except postal code, you can drop it if not required.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer	Customer Segment	City	State	Country	Postal Code	Market	Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Shipping Cost	Order Total
2	32298	CA-2012-1	31-07-2011	31-07-2011	Same Day	RH-19495	Rick Hans Consumer	New York	New York	United States	10024	US	East	TEC-AC-1C	Technolog	Accessories	Plantronic	2309.65	7	0	762.1845	933.57	Cr
3	26341	IN-2013-7	5/2/2013	7/2/2013	Second Class	JR-16210	Justin Ritts Corporate	Wollongong	New South Wales	Australia		APAC	Oceania	FUR-CH-1C	Furniture	Chairs	Novimex E	3709.395	9	0.1	-288.765	923.63	Cr
4	25330	IN-2013-7	17-10-2011	18-10-2011	First Class	CR-12730	Craig Reite Consumer	Brisbane	Queensland	Australia		APAC	Oceania	TEC-PH-1C	Technolog	Phones	Nokia Sma	5175.171	9	0.1	919.971	915.49	M
5	13524	ES-2013-1	28-01-2011	30-01-2011	First Class	KM-16375	Katherine Home Office	Berlin	Berlin	Germany		EU	Central	TEC-PH-1C	Technolog	Phones	Motorola	2892.51	5	0.1	-96.54	910.16	M
6	47221	SG-2013-4	#####	#####	Same Day	RH-9495	Rick Hans Consumer	Dakar	Dakar	Senegal		Africa	Africa	TEC-SHA-1	Technolog	Copiers	Sharp Wire	2832.96	8	0	311.52	903.04	Cr
7	22732	IN-2013-4	28-06-2011	1/7/2013	Second Class	JM-15655	Jim Mitchi Corporate	Sydney	New South Wales	Australia		APAC	Oceania	TEC-PH-1C	Technolog	Phones	Samsung S	2862.675	5	0.1	763.275	897.35	Cr
8	30570	IN-2011-8	#####	#####	First Class	TS-21340	Toby Swin Consumer	Porirua	Wellington	New Zealand		APAC	Oceania	FUR-CH-1C	Furniture	Chairs	Novimex E	1822.08	4	0	564.84	894.77	Cr
9	31192	IN-2012-8	14-04-2011	18-04-2011	Standard Class	MB-18085	Mick Brow Consumer	Hamilton	Waikato	New Zealand		APAC	Oceania	FUR-TA-1C	Furniture	Tables	Chromcraft	5244.84	6	0	996.48	878.38	Hi
10	40155	CA-2014-1	14-10-2011	21-10-2011	Standard Class	CJW-15220	Jane Wacc Corporate	Sacramento	California	United States	95823	US	West	OFF-BI-10I	Office Sup	Binders	Fellowes P	5083.96	5	0.2	1906.485	867.69	Lc
11	40936	CA-2012-1	28-01-2011	31-01-2011	Second Class	JH-15985	Joseph Ho Consumer	Concord	North Carolina	United States	28027	US	South	FUR-TA-1C	Furniture	Tables	Chromcraft	4297.644	13	0.4	-1862.31	865.74	Cr
12	34577	CA-2011-1	5/4/2011	9/4/2011	Second Class	GM-14695	Greg Marx Corporate	Alexandria	Virginia	United States	22304	US	South	OFF-SU-1C	Office Sup	Supplies	Martin Yal	4164.05	5	0	83.281	846.54	Hi
13	28879	ID-2012-2	19-04-2011	22-04-2011	First Class	AJ-10780	Anthony Je Corporate	Kabul	Kabul	Afghanistan		APAC	Central Asia	FUR-TA-1C	Furniture	Tables	Bevis Conf	4626.15	5	0	647.55	835.57	Hi
14	45794	SA-2011-1	27-12-2011	29-12-2011	Second Class	MM-7260	Magdalen Consumer	Jizan	Jizan	Saudi Arabia		EMEA	EMEA	TEC-CIS-1C	Technolog	Phones	Cisco Smai	2616.96	4	0	1151.4	832.41	Cr
15	4132	MX-2012-1	13-11-2011	13-11-2011	Same Day	VF-21715	Vicky Freyi Home Office	Toledo	Parana	Brazil		LATAM	South	FUR-CH-1C	Furniture	Chairs	Harbour Ci	2221.8	7	0	622.02	810.25	Cr
16	27704	IN-2013-7	6/6/2013	8/6/2013	Second Class	PF-19120	Peter Fulle Consumer	Mudanjiang	Heilongjiang	China		APAC	North Asia	OFF-AP-10	Office Sup	Appliances	KitchenAid	3701.52	12	0	1036.08	804.54	Cr
17	13779	ES-2014-5	31-07-2011	3/8/2014	Second Class	BP-11185	Ben Peter Corporate	Paris	Ile-de-France	France		EU	Central	OFF-AP-10	Office Sup	Appliances	Breville Re	1889.588	4	0.1	186.948	801.66	Cr
18	36178	CA-2014-1	#####	#####	Second Class	TB-21175	Thomas B Corporate	Henderson	Kentucky	United States	42420	US	South	TEC-AC-1C	Technolog	Accessories	Logitech d	2249.91	9	0	517.4793	780.7	Cr
19	12069	ES-2014-1	8/9/2014	14-09-2011	Standard Class	PI-18835	Patrick Jor Corporate	Prato	Tuscany	Italy		EU	South	OFF-AP-10	Office Sup	Appliances	Hoover Str	7958.58	14	0	3979.08	778.32	Lc
20	22096	IN-2014-1	31-01-2011	1/2/2014	First Class	JS-15685	Jim Sink Corporate	Townsville	Queensland	Australia		APAC	Oceania	TEC-CO-1C	Technolog	Copiers	Brother Fa	2565.594	9	0.1	28.404	766.93	Cr
21	49463	TZ-2014-8	#####	#####	Second Class	RH-9555	Ritsa Hight Consumer	Uvinza	Kigoma	Tanzania		Africa	Africa	OFF-KIT-1C	Office Sup	Appliances	KitchenAid	3409.74	6	0	818.28	763.38	Hi
22	46630	PL-2012-7	8/8/2012	#####	First Class	AB-600	Ann Blume Corporate	Bytom	Silesia	Poland		EMEA	EMEA	FUR-HON-1	Furniture	Tables	Hon Comp	1977.72	4	0	276.84	759.47	Cr
23	31784	CA-2011-1	29-10-2011	31-10-2011	First Class	SA-20830	Sue Ann R Consumer	Chicago	Illinois	United States	60610	US	Central	TEC-PH-1C	Technolog	Phones	Apple iPho	2735.952	6	0.2	341.994	752.51	Hi
24	21586	IN-2011-4	2/5/2011	3/5/2011	First Class	JK-15325	Jason Klan Corporate	Suzhou	Anhui	China		APAC	North Asia	FUR-CH-1C	Furniture	Chairs	SAFCO Exe	2754	6	0	358.02	752.47	Cr
25	13528	ES-2013-2	27-02-2011	1/3/2013	Second Class	LB-16795	Laurel Belt Home Office	Edinburgh	Scotland	United Kingdom		EU	North	OFF-AP-10	Office Sup	Appliances	KitchenAid	5273.7	10	0	1898.4	730.91	Hi
26	1570	US-2014-1	31-07-2011	1/8/2014	First Class	NP-18325	Naresj Pat Consumer	Juárez	Chihuahua	Mexico		LATAM	North	TEC-PH-1C	Technolog	Phones	Motorola	1713.84	4	0	445.52	728.97	Cr
27	3484	MX-2014-1	8/9/2014	8/9/2014	First Class	VD-21670	Valerie Do Consumer	Soyapang	San Salvador	El Salvador		LATAM	Central	FUR-TA-1C	Furniture	Tables	Hon Comp	2106.496	8	0.2	526.496	728.39	Cr
28	30191	IN-2011-1	17-12-2011	20-12-2011	First Class	PB-19210	Phillip Brey Corporate	Taipei	Taipei City	Taiwan		APAC	North Asia	FUR-TA-1C	Furniture	Tables	Lesro Conl	1715.16	2	0	720.36	725.57	Cr
29	11645	ES-2011-4	14-03-2011	17-03-2011	Second Class	EB-14110	Eugene Ba Consumer	Leipzig	Saxony	Germany		EU	Central	OFF-AP-10	Office Sup	Appliances	Hoover Str	3069.738	6	0.1	1364.238	725.34	Cr
30	37311	CA-2013-1	#####	#####	First Class	KF-16285	Karen Ferra Home Office	Los Angeles	California	United States	90008	US	West	TEC-PH-1C	Technolog	Phones	Apple iPho	4158.912	8	0.2	363.9048	714.66	Hi

Loading the Dataset

Before you can build a view and analyses of your data, you must first connect the data to IBM Cognos. Cognos supports connecting to a wide variety of data, stored in a variety of places. The data might be stored on your computer in a spreadsheet or a text file, or in a big data, relational, or cube (multidimensional) database on a server in your enterprise. In our case, we will be using a spreadsheet or text file for making our analysis

Upload the required Dataset from your Laptop to IBM Cloud account for Data Analytics.



Quick launch



Upload data

Upload or drag and drop spreadsheets, csv files, and other data sources.



Prepare data

Use data modules to clean and connect data from multiple resources.



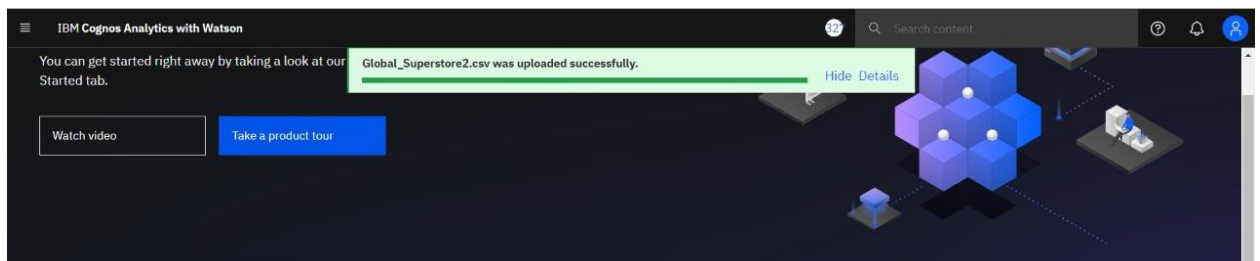
Exploration

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Create sophisticated, multi-page, multi-query dashboards, reports, or stories.



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Get started

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Navigation paths

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- # Row Id
- # Row ID
- Order ID
- Order Date
- Ship Date
- Ship Mode
- Customer ID
- Customer Name
- Segment
- City
- State
- Country
- Postal Code
- Market
- Region

Row Id	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
2	26341	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210
3	25330	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR-12730
4	13524	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM-16375
5	47221	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH-9495
6	22732	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM-15655
7	30570	IN-2011-81826	2011-11-07	2011-11-09	First Class	TS-21340
8	31192	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085
9	40155	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW-15220
10	40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985

Prepare the Dataset

Once you load the data, we need to Prepare the data.

- Prepare Calculations of Year, Month, Day fields and also the related Navigation path
- Create Few more Calculations – Target Sales, Min Sales, Max Sales, Middle Range Sales.

Select sources

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Type any text to filter items in this folder

- 28Mar.xlsx 4/23/2022 11:54 AM
- Global_Superstore2 Dashboard 5/31/2022 1:49 AM
- Global_Superstore2 Prep Data 5/30/2022 6:10 AM
- Global_Superstore2.csv 5/30/2022 5:36 AM
- Sample Superstore28Mar.xlsx 4/23/2022 12:00 PM
- SS_28Mar_DateDashboard 4/24/2022 3:42 AM
- SS_28Mar_DateExploration 4/24/2022 2:16 AM
- SS_28Mar_DatePrep 4/23/2022 12:47 PM

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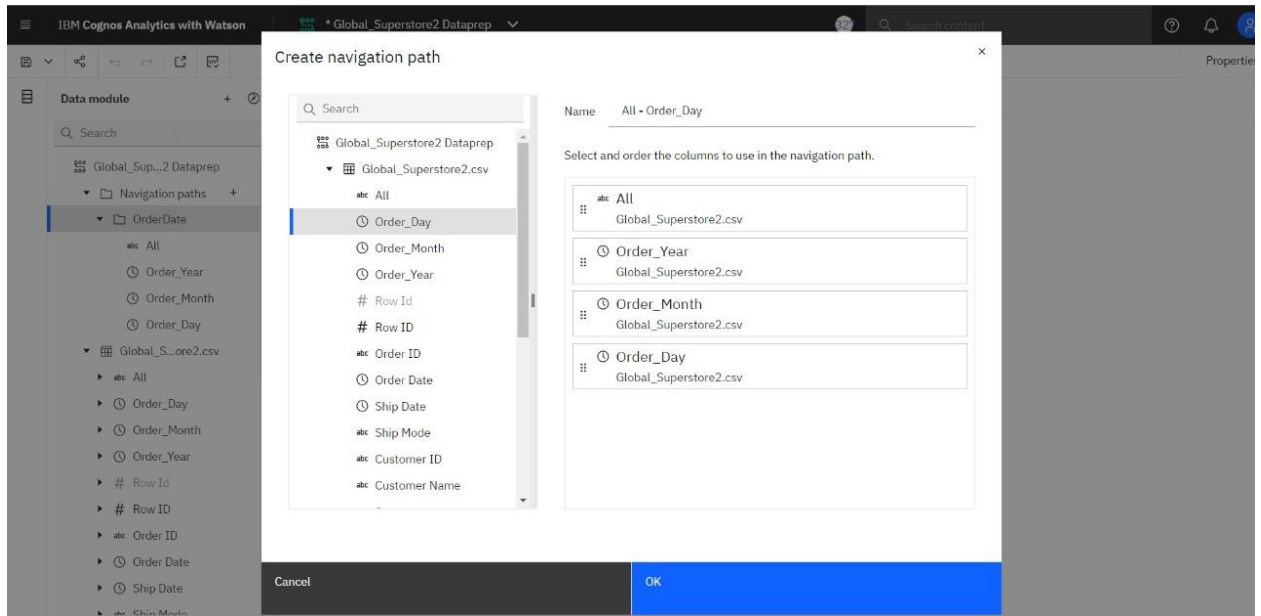
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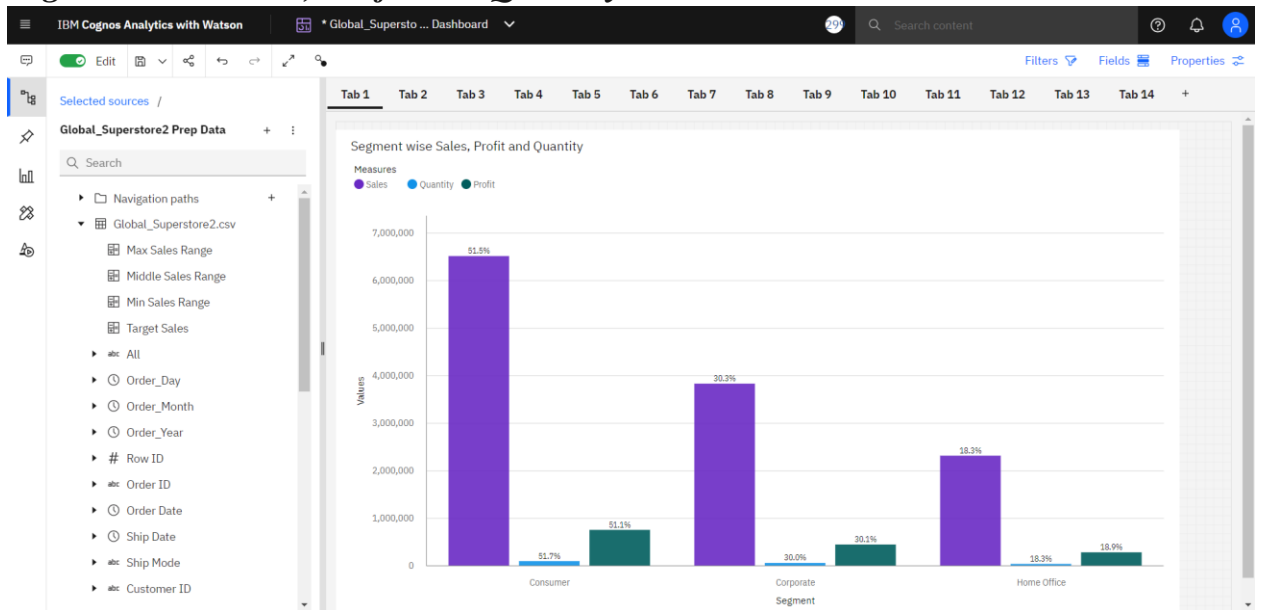
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- ☐ Today
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- ☐ Past month

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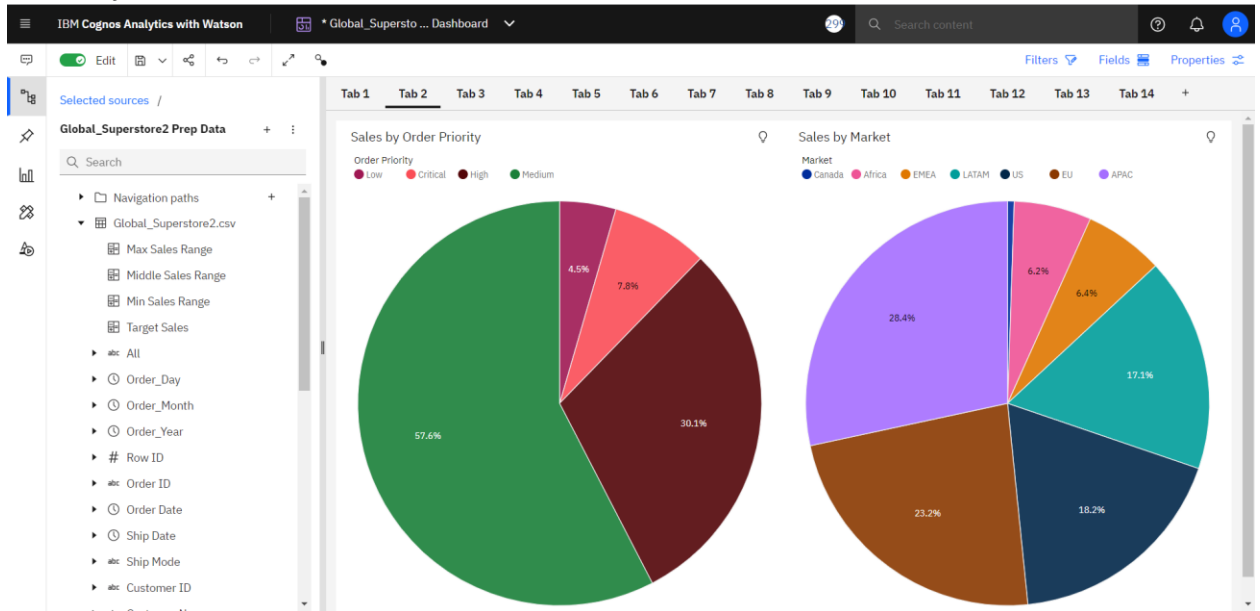


- Data Visualization Charts

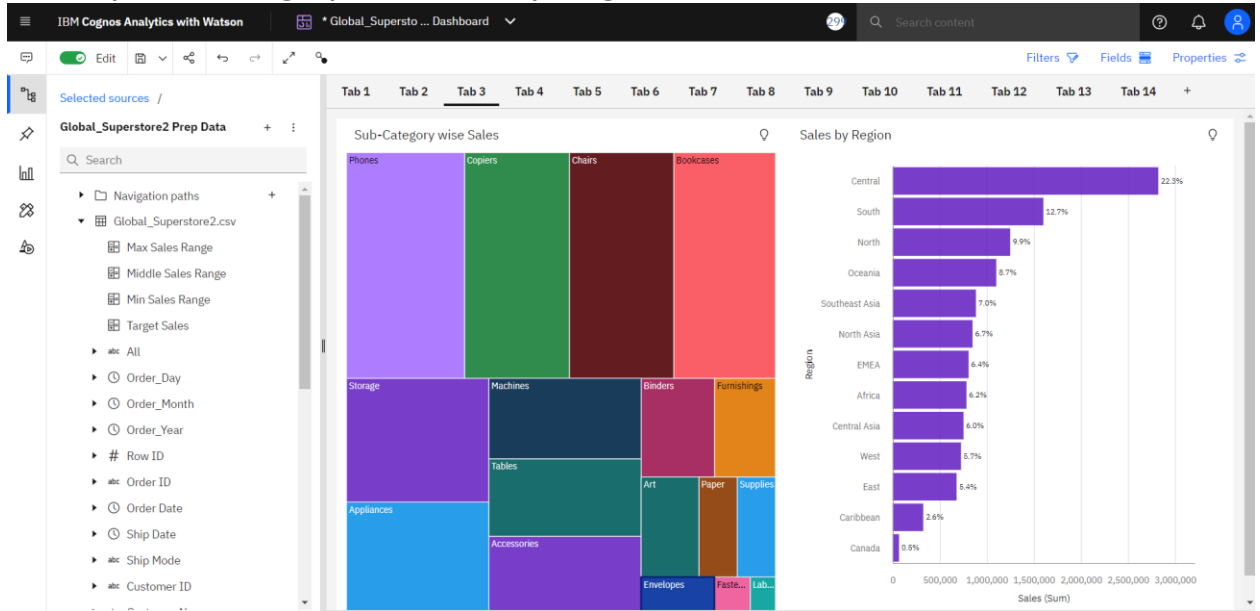
1) Segment wise Sales, Profit and Quantity



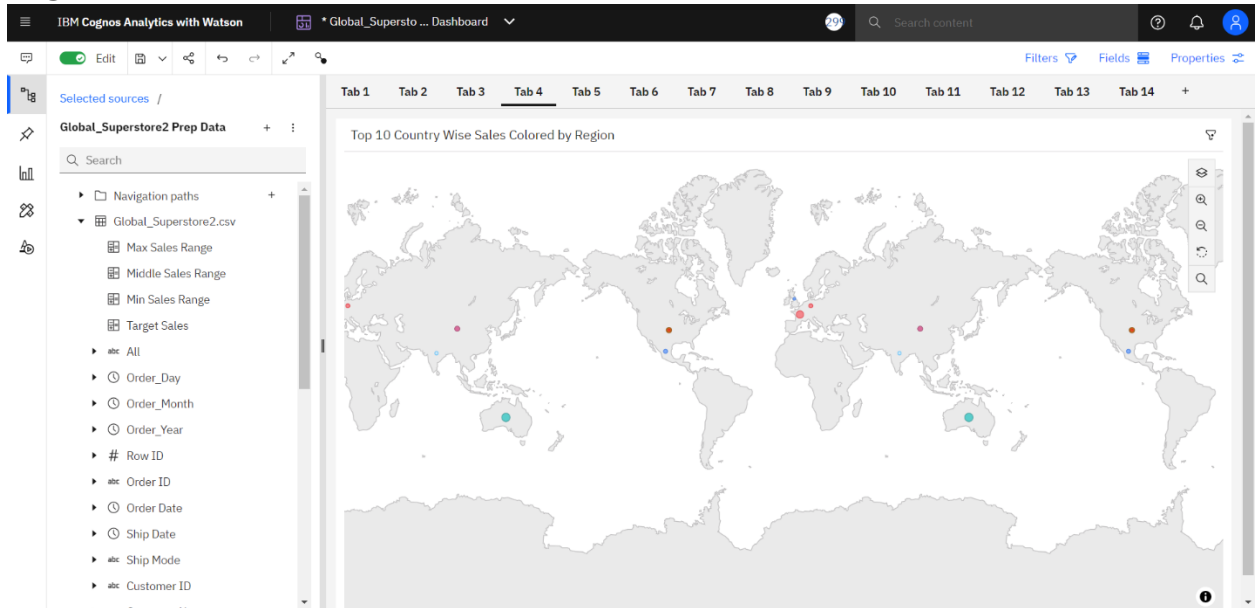
2) Sales by Market



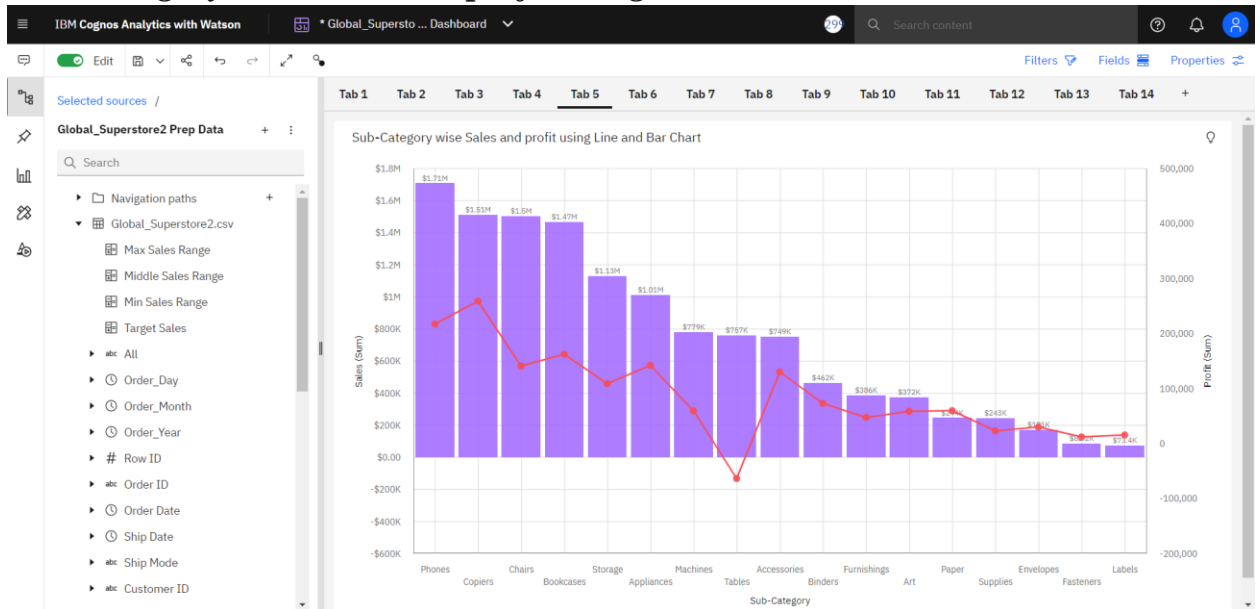
3) Sales by Sub Category and Sales by Region



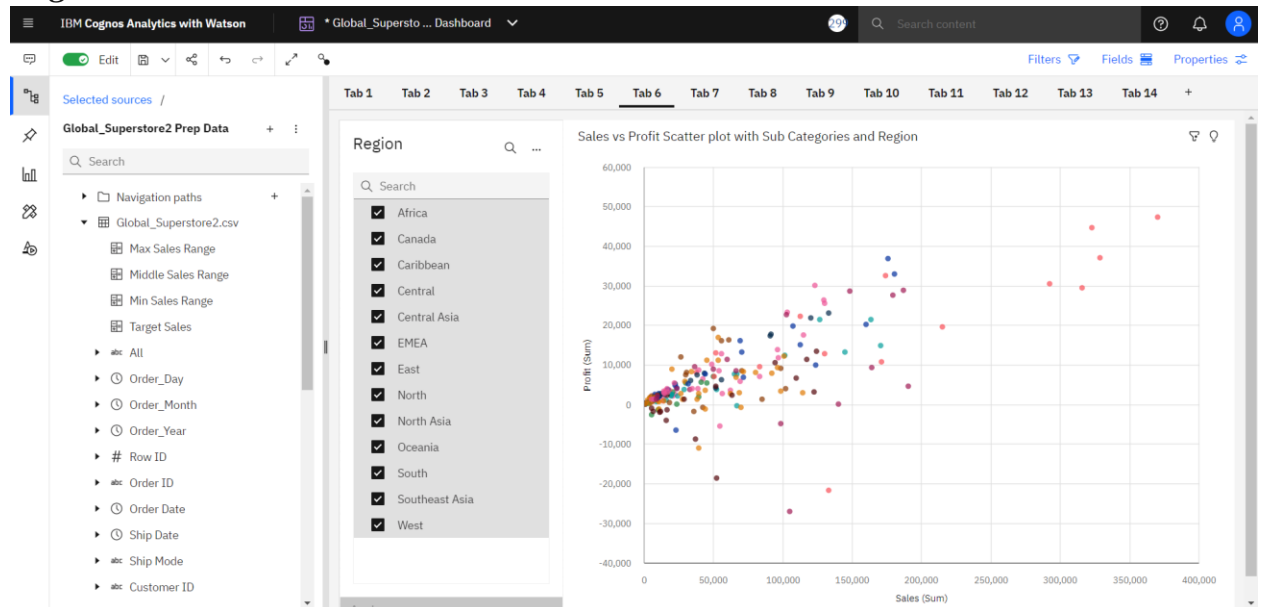
4) Top 10 Country Wise Sales Colored by Region



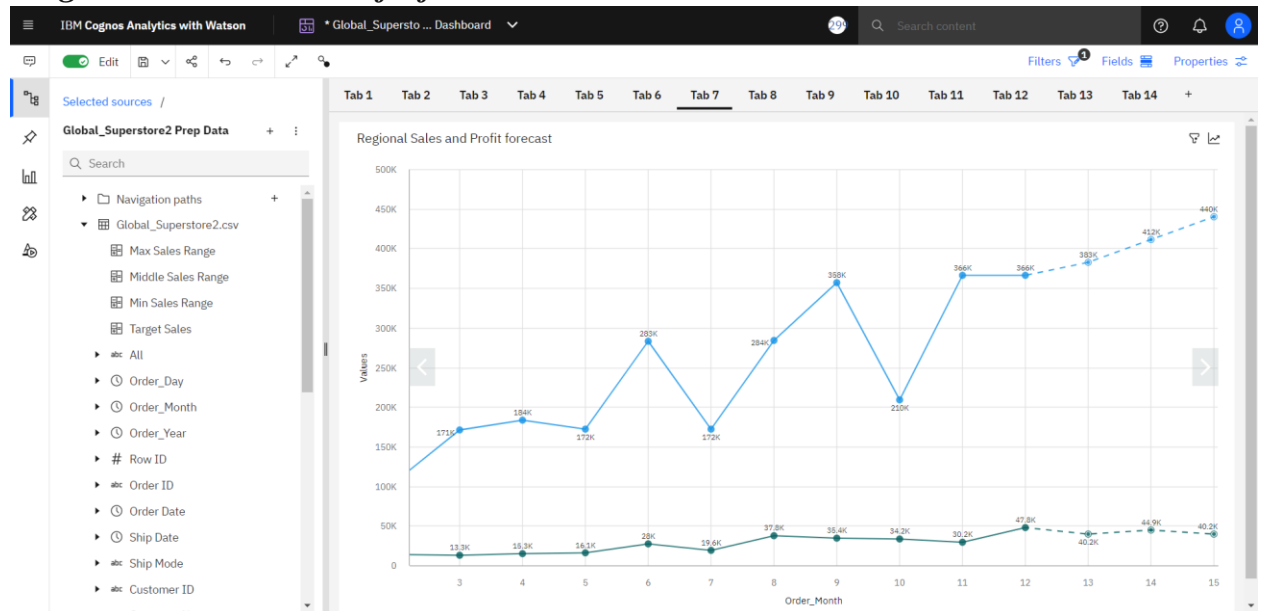
5) Sub-Category wise Sales and profit using Line and Bar Chart



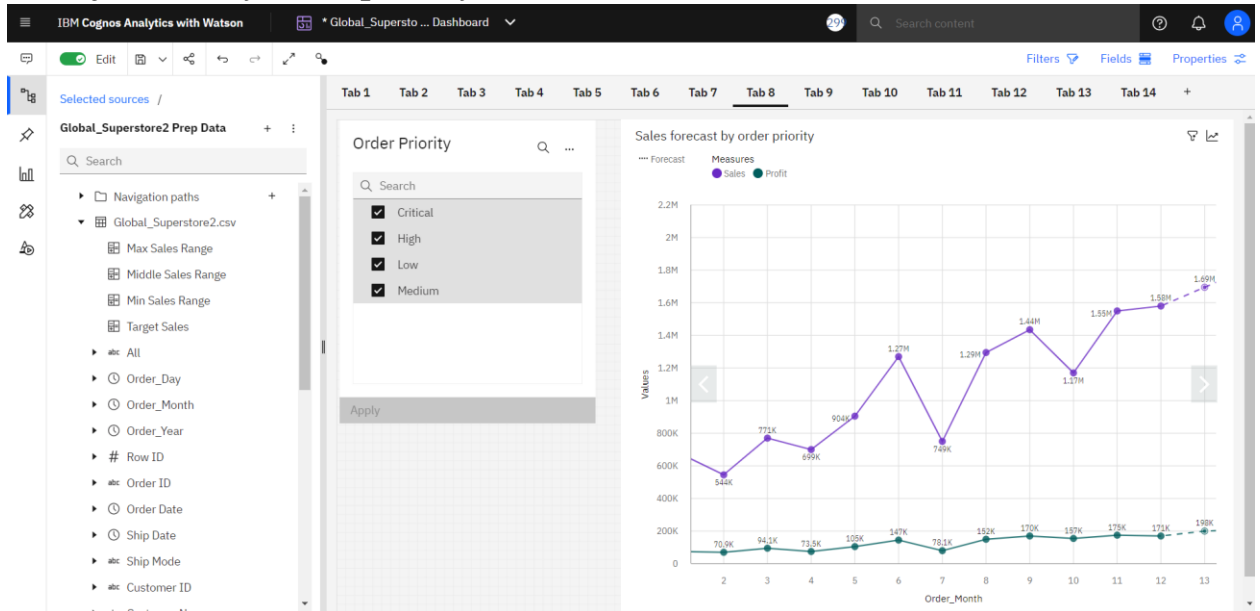
6) Sales vs Profit Scatter plot with Sub Categories and Region



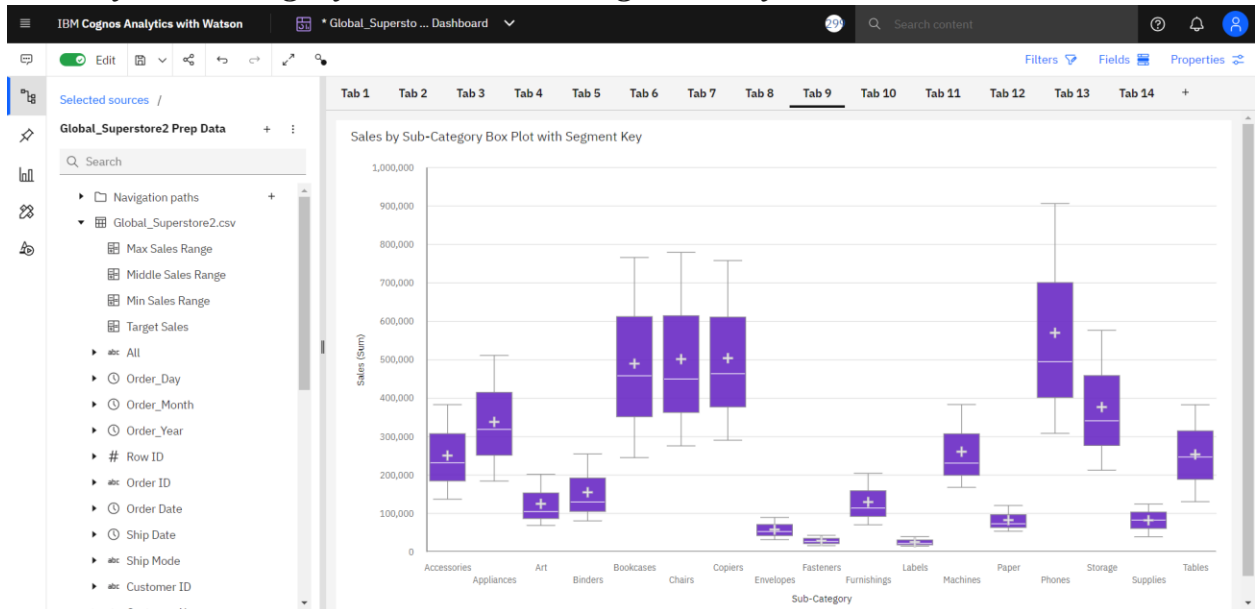
7) Regional Sales and Profit forecast



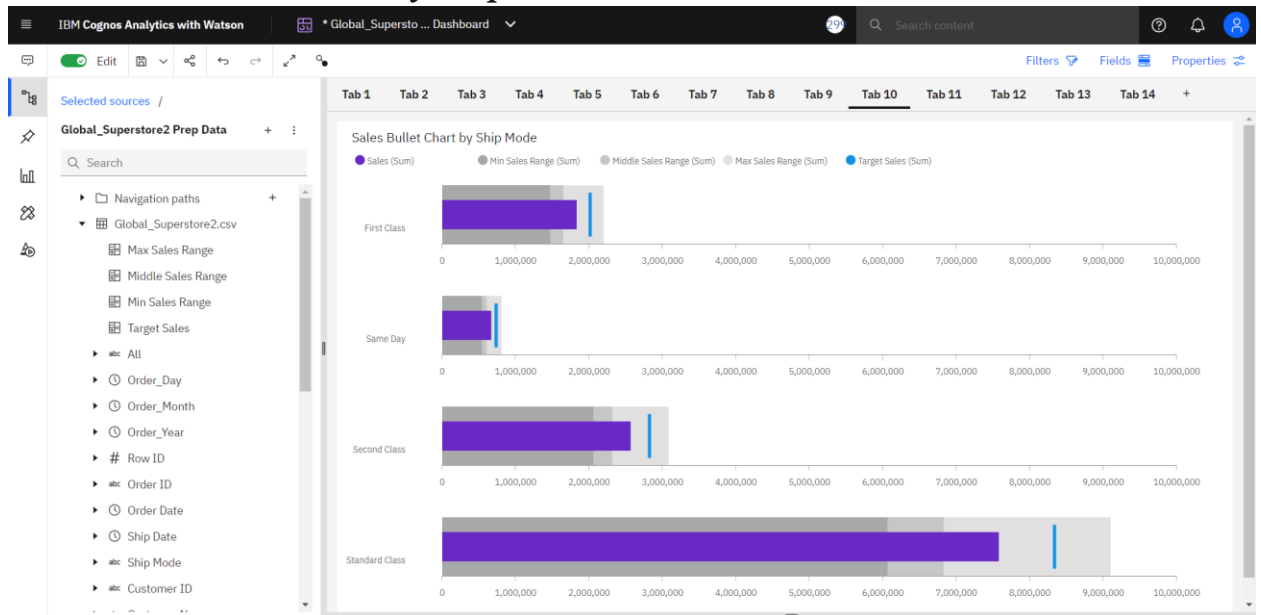
8) Sales forecast by order priority



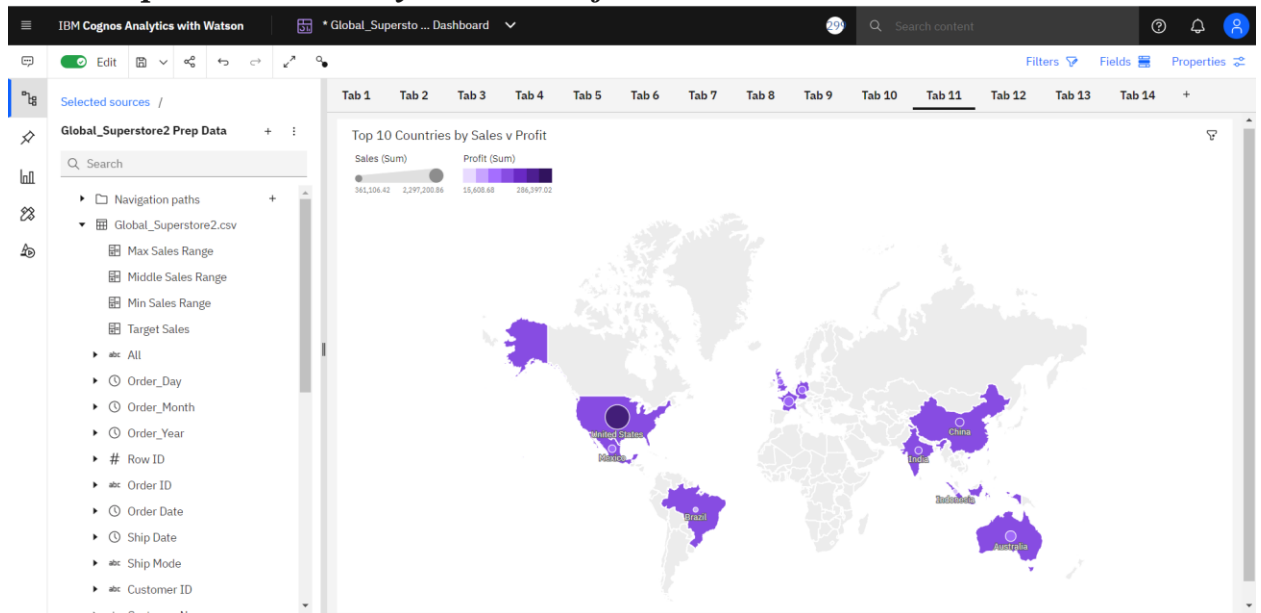
9) Sales by Sub-Category Box Plot with Segment Key



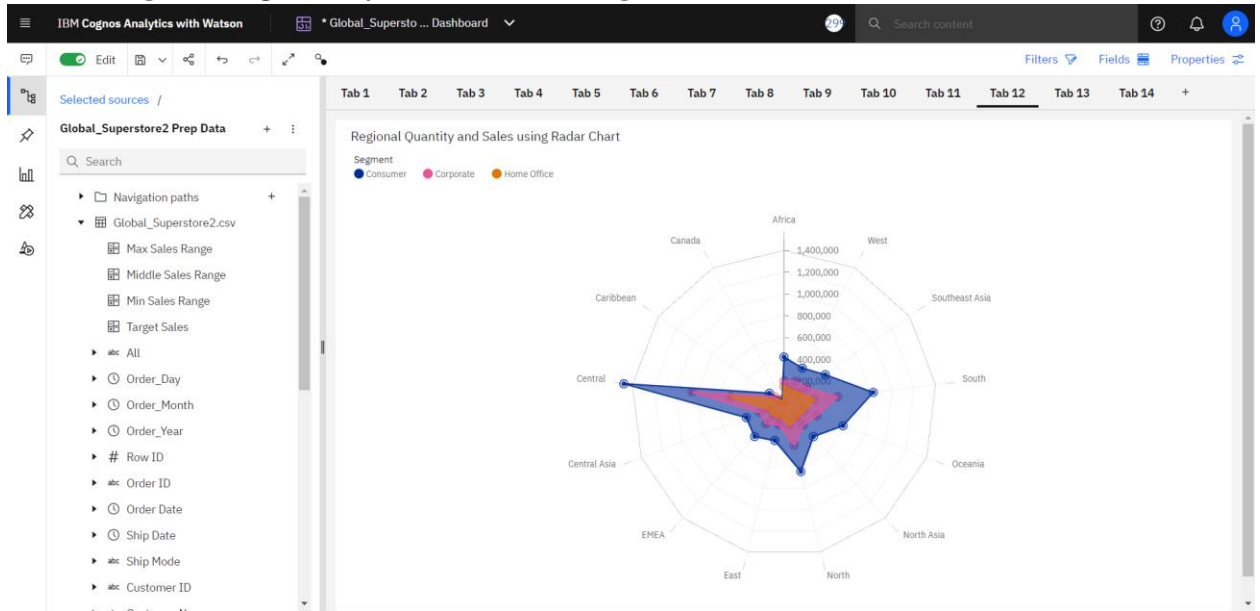
10) Sales Bullet Chart by Ship Mode



11) Top 10 Countries by Sales v Profit



12) *Regional Quantity and Sales using Radar Chart*



13) *Country wise Sales using World Cloud*



14) Sales by Sub-Category Dashboard

