

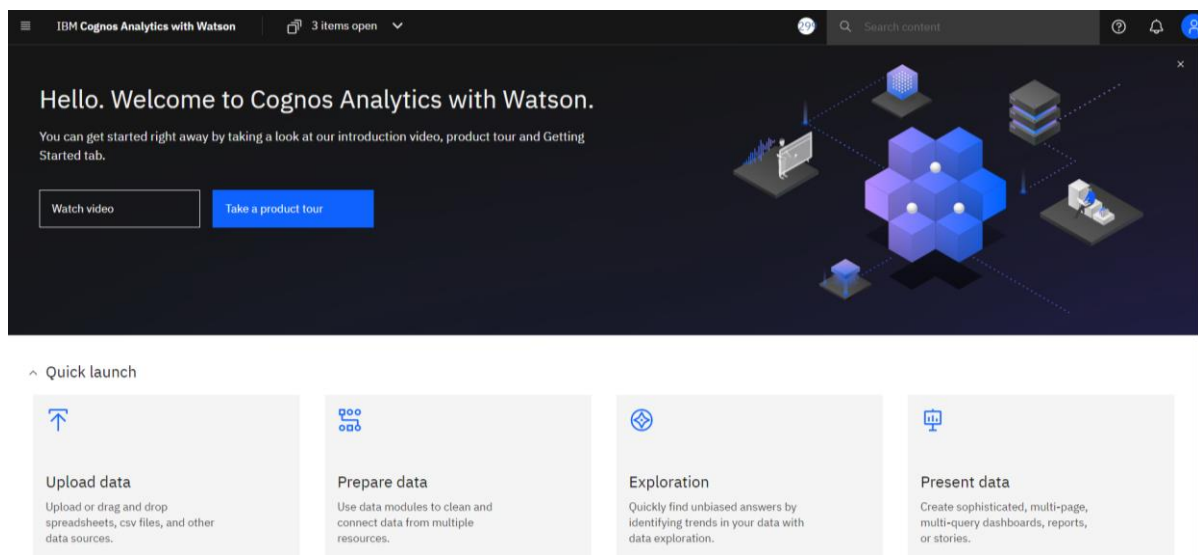
Name : Vishnu Pasad M

Reg No : 19BAI1127

Smart Internz guided project : Sample super store data analytics using IBM Cognos

Screen shots

IBM Cloud



Working with dataset

Understanding the dataset

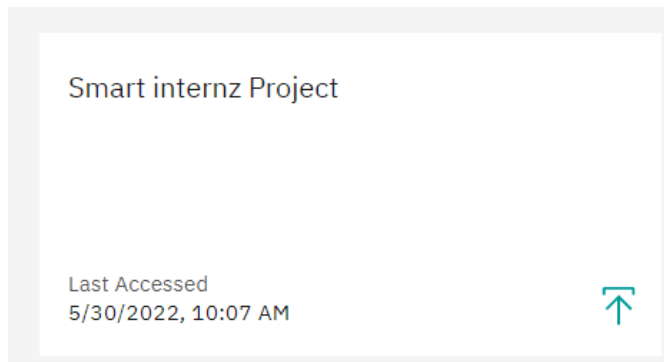
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country	City	State	Postal Code	Region	Product ID	Category
1	CA-2016-152156	08-11-2016	11-11-2016	Second Class	CG-12520	Claire Gute	Consumer	United State	Henderson	Kentucky	42420	South	FUR-BO-100C	Furniture
2	CA-2016-152156	08-11-2016	11-11-2016	Second Class	CG-12520	Claire Gute	Consumer	United State	Henderson	Kentucky	42420	South	FUR-CH-100C	Furniture
3	CA-2016-138688	12-06-2016	16-06-2016	Second Class	DV-13045	Darrin Van H	Corporate	United State	Los Angeles	California	90036	West	OFF-IA-1000	Office Suppli
4	US-2015-108966	11-10-2015	18-10-2015	Standard Cla	SO-20335	Sean O'Donn	Consumer	United State	Fort Lauderdale	Florida	33311	South	FUR-TA-1000	Furniture
5	US-2015-108966	11-10-2015	18-10-2015	Standard Cla	SO-20335	Sean O'Donn	Consumer	United State	Fort Lauderdale	Florida	33311	South	OFF-ST-1000	Office Suppli
6	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	FUR-FU-1000	Furniture
7	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	OFF-AR-1000	Office Suppli
8	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	TEC-PH-1000	Technology
9	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	OFF-AR-1000	Office Suppli
10	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	OFF-AP-1000	Office Suppli
11	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	OFF-PA-1000	Office Suppli
12	CA-2014-115812	09-06-2014	14-06-2014	Standard Cla	BH-11710	Brosina Hoff	Consumer	United State	Los Angeles	California	90032	West	TEC-PH-1000	Technology
13	CA-2017-114412	15-04-2017	20-04-2017	Standard Cla	AA-10480	Andrew Aller	Consumer	United State	Concord	North Caroli	28027	South	OFF-PA-1000	Office Suppli
14	CA-2016-161389	05-12-2016	10-12-2016	Standard Cla	IM-15070	Irene Maddo	Consumer	United State	Seattle	Washington	98103	West	OFF-BI-1000	Office Suppli
15	US-2015-118983	22-11-2015	26-11-2015	Standard Cla	HP-14815	Harold Pawl	Home Office	United State	Fort Worth	Texas	76106	Central	OFF-BI-1000	Office Suppli
16	US-2015-118983	22-11-2015	26-11-2015	Standard Cla	HP-14815	Harold Pawl	Home Office	United State	Fort Worth	Texas	76106	Central	OFF-BI-1000	Office Suppli
17	CA-2014-105893	11-11-2014	18-11-2014	Standard Cla	PK-19075	Pete Kriz	Consumer	United State	Madison	Wisconsin	53711	Central	OFF-ST-1000	Office Suppli
18	CA-2014-167164	13-05-2014	15-05-2014	Second Class	AG-10270	Alejandro Gr	Consumer	United State	West Jordan	Utah	84084	West	OFF-ST-1000	Office Suppli
19	CA-2014-143336	27-08-2014	01-09-2014	Second Class	ZD-21925	Zuschuss Doi	Consumer	United State	San Francisc	California	94109	West	OFF-AR-1000	Office Suppli
20	CA-2014-143336	27-08-2014	01-09-2014	Second Class	ZD-21925	Zuschuss Doi	Consumer	United State	San Francisc	California	94109	West	TEC-PH-1000	Technology
21	CA-2014-143336	27-08-2014	01-09-2014	Second Class	ZD-21925	Zuschuss Doi	Consumer	United State	San Francisc	California	94109	West	OFF-BI-1000	Office Suppli
22	CA-2016-137330	09-12-2016	13-12-2016	Standard Cla	KB-16585	Ken Black	Corporate	United State	Fremont	Nebraska	68025	Central	OFF-AR-1000	Office Suppli
23	CA-2016-137330	09-12-2016	13-12-2016	Standard Cla	KB-16585	Ken Black	Corporate	United State	Fremont	Nebraska	68025	Central	OFF-AP-1000	Office Suppli
24	US-2017-156909	16-07-2017	18-07-2017	Second Class	SF-20065	Sandra Flana	Consumer	United State	Philadelphia	Pennsylvania	19140	East	FUR-CH-1000	Furniture
25	CA-2015-106320	25-09-2015	30-09-2015	Standard Cla	EB-13870	Emily Burns	Consumer	United State	Orem	Utah	84057	West	FUR-TA-1000	Furniture
26	CA-2016-121755	16-01-2016	20-01-2016	Second Class	EH-13945	Eric Hoffman	Consumer	United State	Los Angeles	California	90049	West	OFF-BI-1000	Office Suppli
27	CA-2016-121755	16-01-2016	20-01-2016	Second Class	EH-13945	Eric Hoffman	Consumer	United State	Los Angeles	California	90049	West	TEC-AC-1000	Technology
28	US-2015-150630	17-09-2015	21-09-2015	Standard Cla	TB-21520	Tracy Blumst	Consumer	United State	Philadelphia	Pennsylvania	19140	East	FUR-BO-100C	Furniture
29	US-2015-150630	17-09-2015	21-09-2015	Standard Cla	TB-21520	Tracy Blumst	Consumer	United State	Philadelphia	Pennsylvania	19140	East	OFF-BI-1000	Office Suppli
30	US-2015-150630	17-09-2015	21-09-2015	Standard Cla	TB-21520	Tracy Blumst	Consumer	United State	Philadelphia	Pennsylvania	19140	East	FUR-FU-1000	Furniture

P	Q	R	S	T	U	V
Sub-Category	Product Name	Sales	Quantity	Discount	Profit	
Bookcases	Bush Somers	261.96	2	0	41.9136	
Chairs	Hon Deluxe f	731.94	3	0	219.582	
Labels	Self-Adhesiv	14.62	2	0	6.8714	
Tables	Bretford CR4	957.5775	5	0.45	-383.031	
Storage	Eldon Fold 'h	22.368	2	0.2	2.5164	
Furnishings	Eldon Expres	48.86	7	0	14.1694	
Art	Newell 322	7.28	4	0	1.9656	
Phones	Mitel 5320 IF	907.152	6	0.2	90.7152	
Binders	DXL Angle-Vi	18.504	3	0.2	5.7825	
Appliances	Belkin F5C20	114.9	5	0	34.47	
Tables	Chromcraft F	1706.184	9	0.2	85.3092	
Phones	Konftel 250 C	911.424	4	0.2	68.3568	
Paper	Xerox 1967	15.552	3	0.2	5.4432	
Binders	Fellowes PB2	407.976	3	0.2	132.5922	
Appliances	Holmes Repl	68.81	5	0.8	-123.858	
Binders	Storex DuraT	2.544	3	0.8	-3.816	
Storage	Stur-D-Stor S	665.88	6	0	13.3176	
Storage	Fellowes Sup	55.5	2	0	9.99	
Art	Newell 341	8.56	2	0	2.4824	
Phones	Cisco SPA 50	213.48	3	0.2	16.011	
Binders	Wilson Jones	22.72	4	0.2	7.384	
Art	Newell 318	19.46	7	0	5.0596	
Appliances	Acco Six-Out	60.34	7	0	15.6884	
Chairs	Global Delux	71.372	2	0.3	-1.0196	
Tables	Bretford CR4	1044.63	3	0	240.2649	
Binders	Wilson Jones	11.648	2	0.2	4.2224	
Accessories	Imation 8GB	90.57	3	0	11.7741	
Bookcases	Riverside Pal	3083.43	7	0.5	-1665.0522	
Binders	Avery Recycl	9.618	2	0.7	-7.0532	
Furnishings	Howard Milli	124.2	3	0.2	15.525	

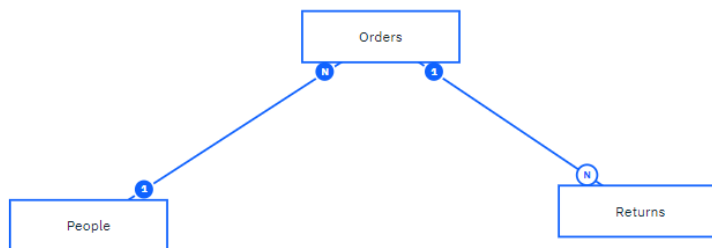
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1	Returned	Order ID		
2	Yes	CA-2017-153822		
3	Yes	CA-2017-129707		
4	Yes	CA-2014-152345		
5	Yes	CA-2015-156440		
6	Yes	US-2017-155999		
7	Yes	CA-2014-157924		
8	Yes	CA-2017-131807		
9	Yes	CA-2016-124527		
10	Yes	CA-2017-135692		
11	Yes	CA-2014-123225		
12	Yes	CA-2017-145772		
13	Yes	US-2014-105137		
14	Yes	CA-2017-101805		
15	Yes	CA-2016-111682		
16	Yes	CA-2017-131492		
17	Yes	CA-2015-104129		
18	Yes	CA-2017-117926		
19	Yes	US-2016-115952		
20	Yes	CA-2015-155761		
21	Yes	CA-2017-100111		
22	Yes	CA-2014-156349		
23	Yes	CA-2016-118899		
24	Yes	CA-2017-108294		
25	Yes	US-2017-123834		
26	Yes	CA-2015-168480		
27	Yes	CA-2017-122007		
28	Yes	CA-2017-128965		
29	Yes	CA-2015-169397		
30	Yes	CA-2015-168564		
31	Yes	CA-2014-102652		

	A	B
1	Person	Region
2	Anna Andrew	West
3	Chuck Magee	East
4	Kelly William	Central
5	Cassandra Br	South

Loading the dataset



Prepare the dataset




Calculations and navigations

Name

OrderDay

Components




1 | day(Order_Date)

Name

OrderMonth

Components



1 | month(Order_Date)

Name OrderYear

Components

Expression




1 year(Order_Date)

Name ShipDay

Components

Expression




1 day(Ship_Date)

Name ShipMonth

Components

Expression




1 month (Ship_Date)

Name ShipYear

Components

Expression




1 year (Ship_Date)

Edit calculation


Name Target Sales


Components


Expression



1 Sales*110/100

Name	Min Sales	
Components		Expression
	<input type="text" value="Search"/>	1 $((\text{Sales} * 90) / 100)$

Name	Max Sales	
Components		Expression
	<input type="text" value="Search"/>	1 $(\text{Sales} * 120) / 100$

Name	Middle Range Sales	
Components		Expression
	<input type="text" value="Search"/>	1 $((\text{Sales} * 95) / 100)$

- ▼


Navigation paths


+
- ▼


ShipDate

abc

All

 ShipYear


 ShipMonth


 ShipDay
- ▼


OrderDate

abc


All

 OrderYear

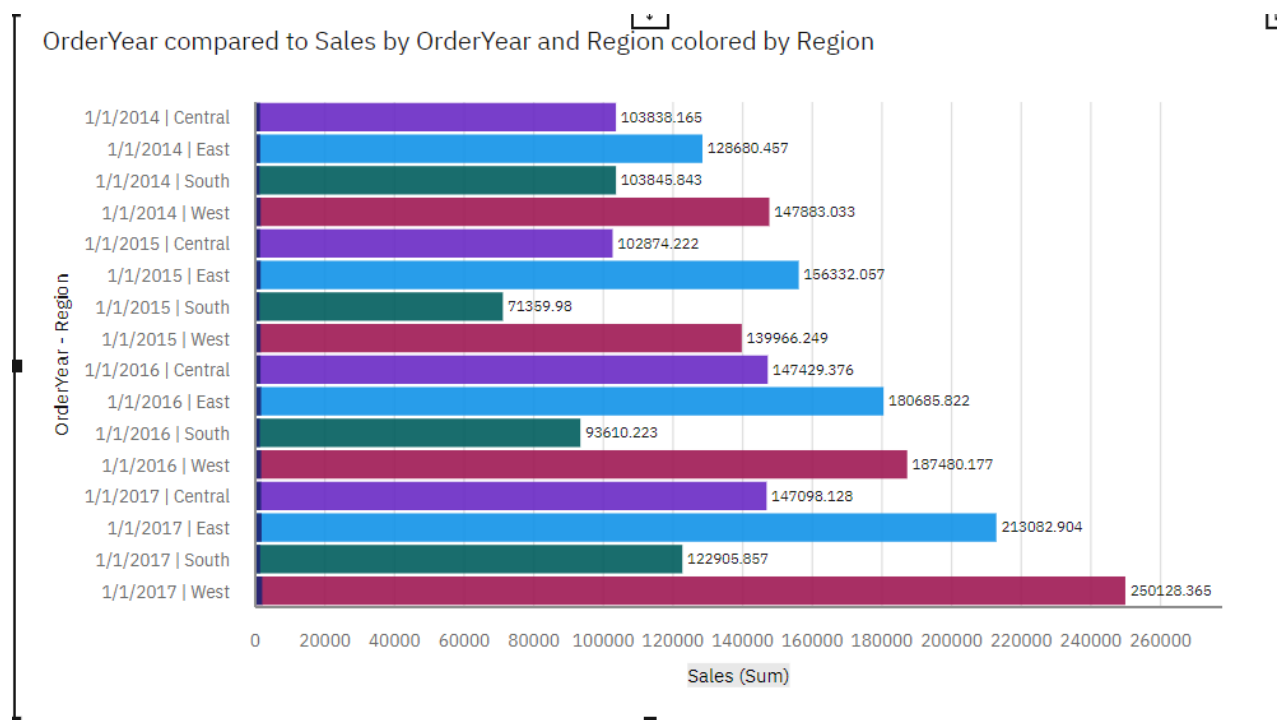
 OrderMonth

 OrderDay

- City

- ▼  Product
 - abc Category
 - abc Sub-Category
 - abc Product Name
 - abc Product ID

Data Visualization charts

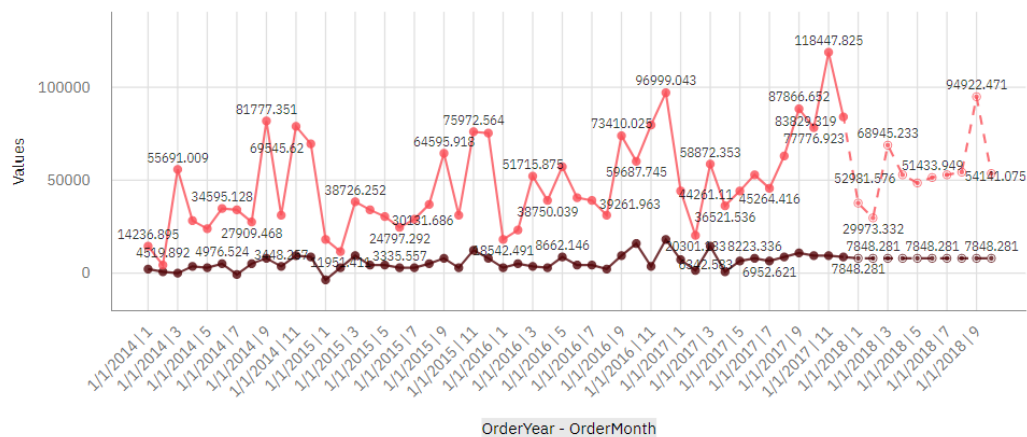


Regional Sales based on year and Year and category

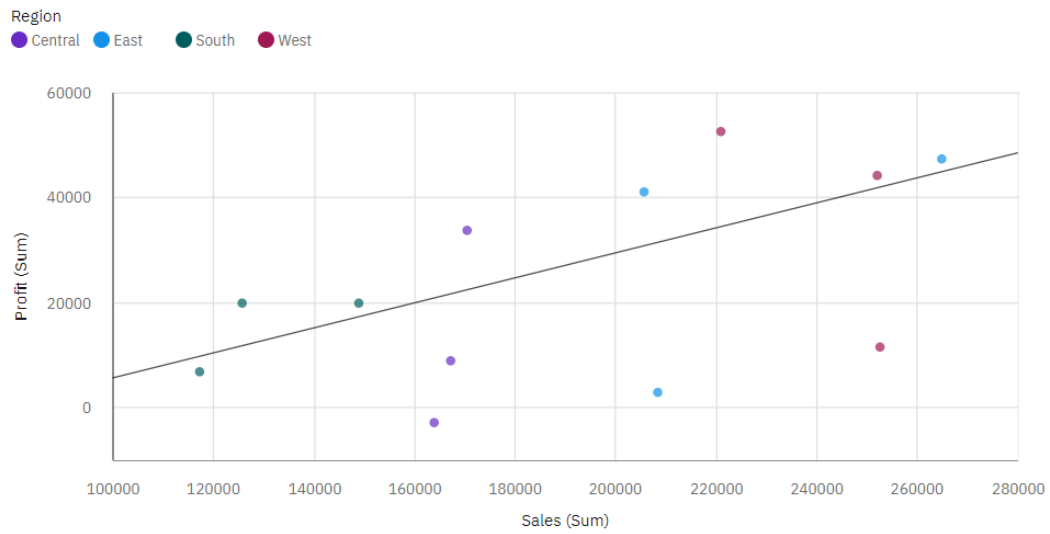
Sales		Central	East	South	West	Summary
1/1/2014	Furniture	32909.664	47232.739	26968.003	50082.448	157192.853
	Office Supplies	37001.691	35968.989	25958.878	52846.854	151776.412
	Technology	33926.81	45478.729	50918.963	44953.731	175278.233
	Summary	103838.165	128680.457	103845.843	147883.033	484247.498
1/1/2015	Furniture	35592.047	53817.432	24103.814	57004.944	170518.237
	Office Supplies	25461.391	42655.245	31253.295	37863.532	137233.463
	Technology	41820.784	59859.38	16002.871	45097.774	162780.809
	Summary	102874.222	156332.057	71359.98	139966.25	470532.509
1/1/2016	Furniture	50773.182	46387.172	27921.441	73819.64	198901.436
	Office Supplies	45792.789	61801.208	28666.628	47679.357	183939.982
	Technology	50863.405	72497.442	37022.154	65981.179	226364.18
Summary		147429.376	180685.822	93610.223	187480.177	609205.598
1/1/2017	Furniture	44522.271	60853.861	38305.425	71705.711	215387.269
	Office Supplies	58770.544	65090.613	39772.512	82463.506	246097.175
	Technology	43805.313	87138.43	44827.92	95959.148	271730.811
	Summary	147098.128	213082.904	122905.857	250128.365	733215.255
Summary		501239.891	678781.24	391721.905	725457.825	2297200.86

Sales and profit forecast

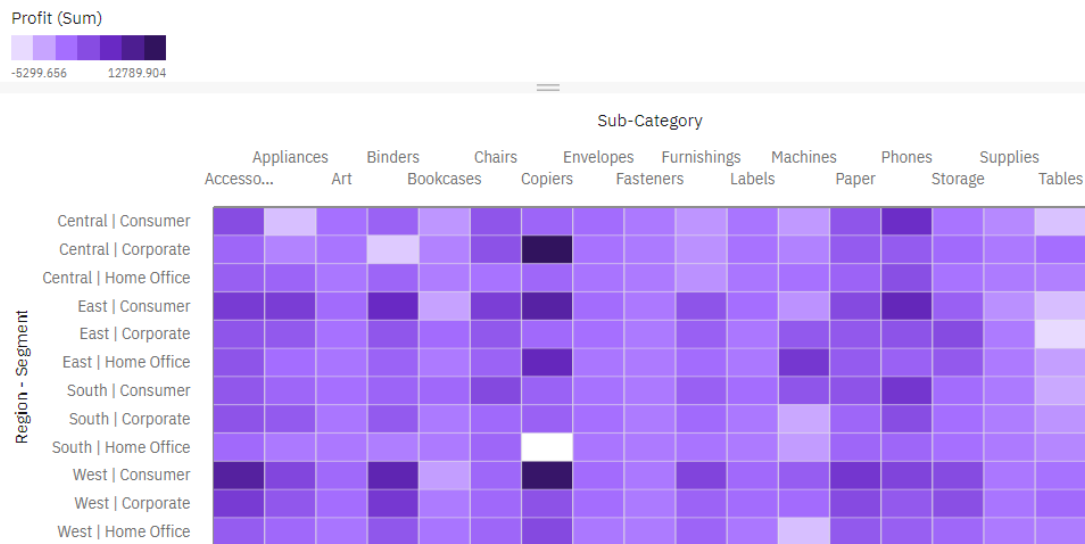
.... Forecast
 ● Sales ● Profit



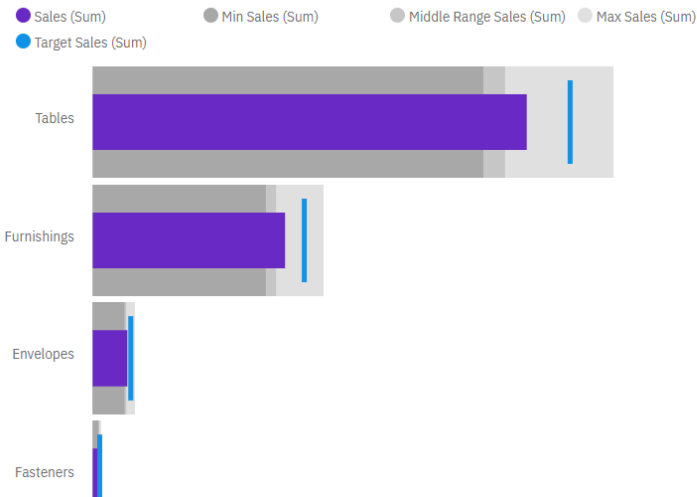
Sales vs Profit Scatter plot for Categories in different regions

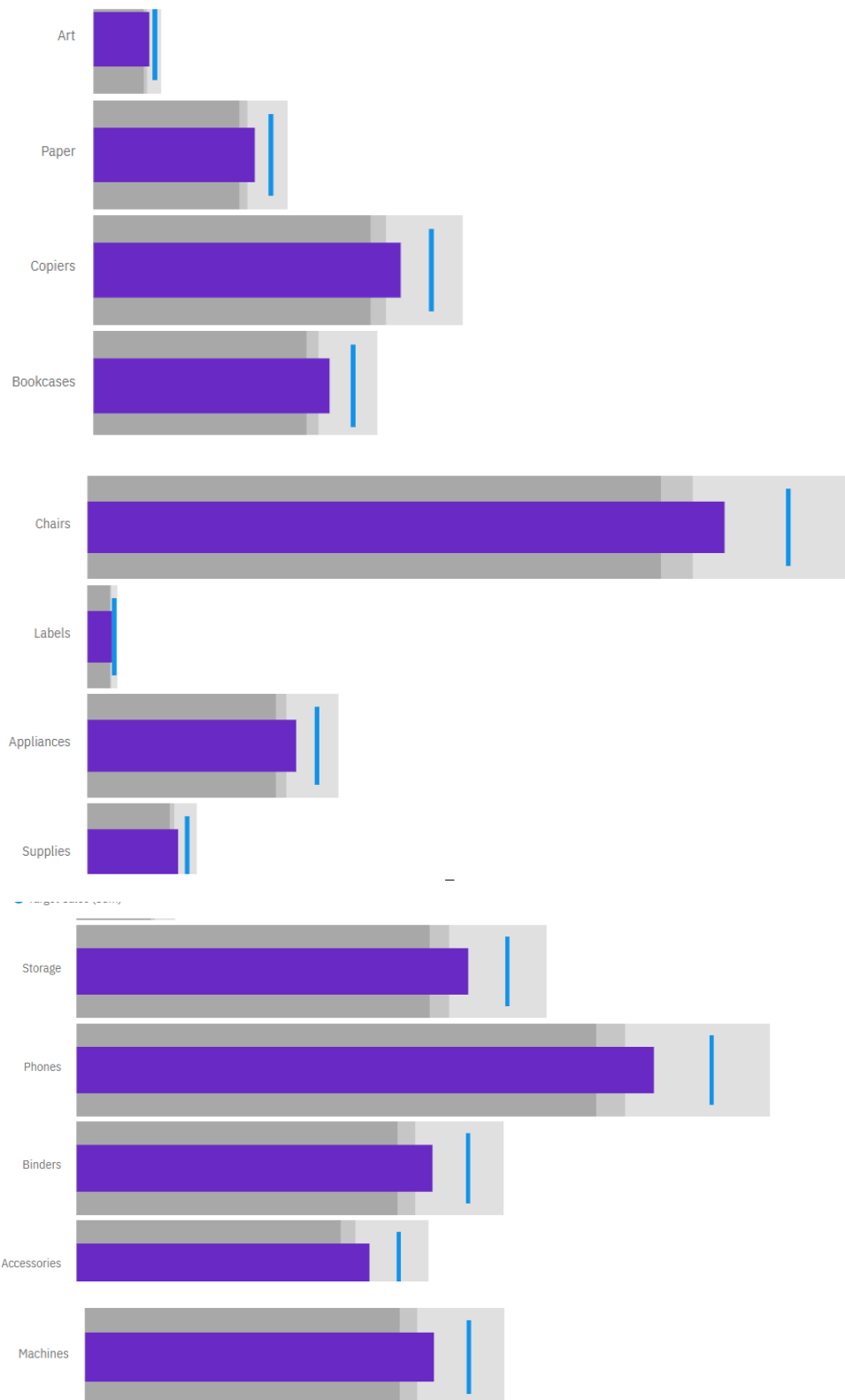


Profit by Region, Segment and Sub-Category

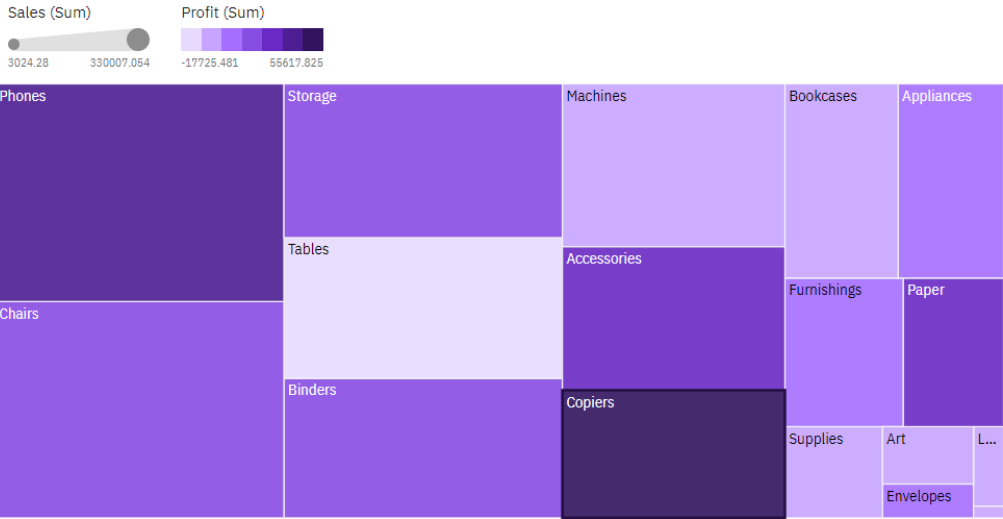


Analytical Sales Value across different sub categories





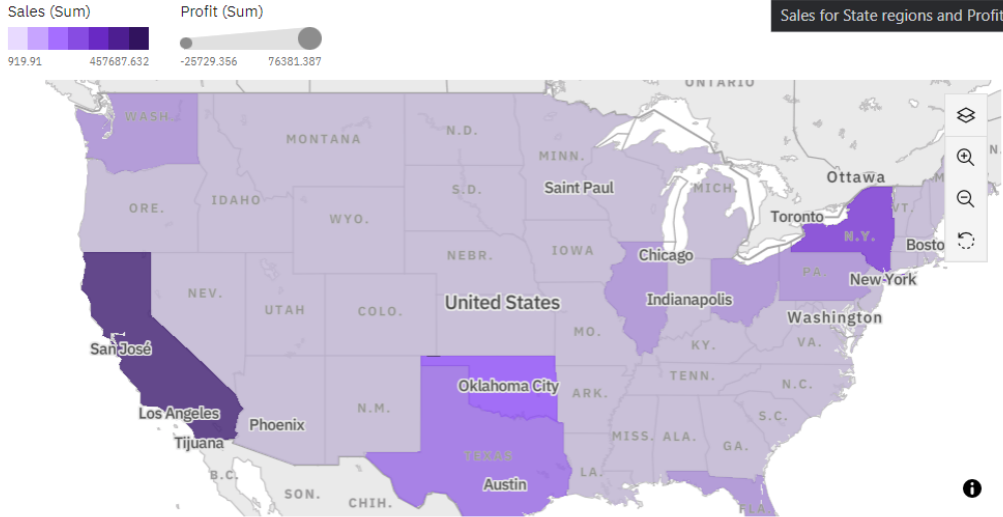
Sub-Category hierarchy colored by Profit and sized by Sales



Word cloud of States with profit and sales

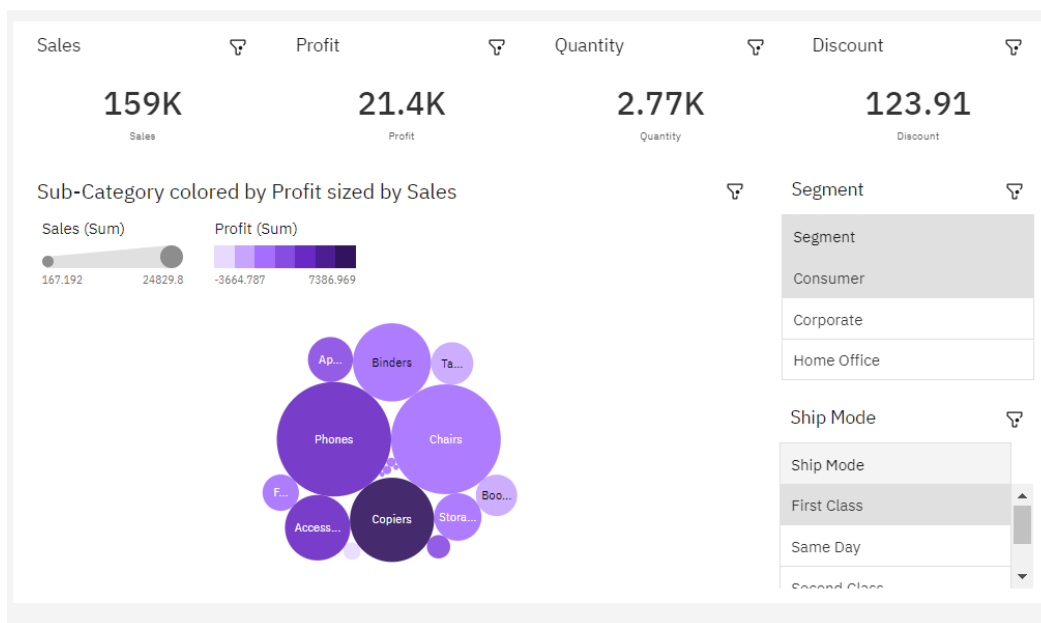
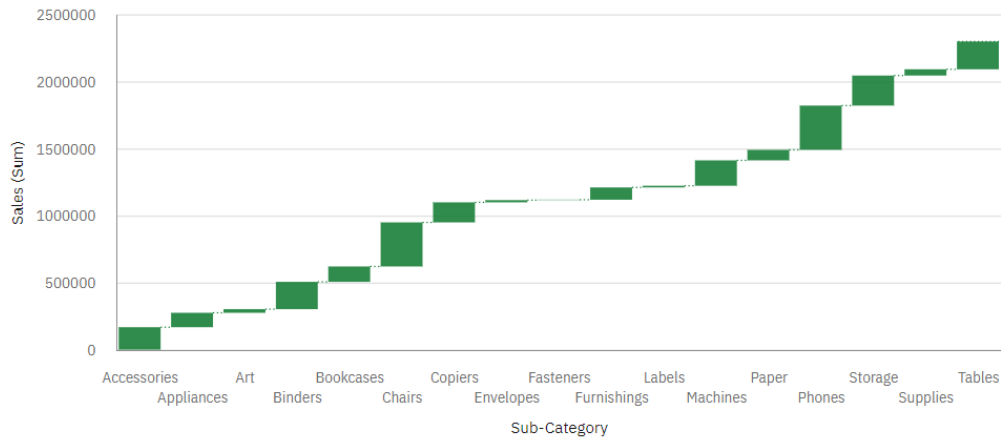


Sales for State regions and Profit for State points



Sales for Sub-Category

Column values
● Increase ● Decrease



Category and Region hierarchy colored by Region and sized by Sales

Sales (Sum)
 Region
● Central ● East ● South ● West

