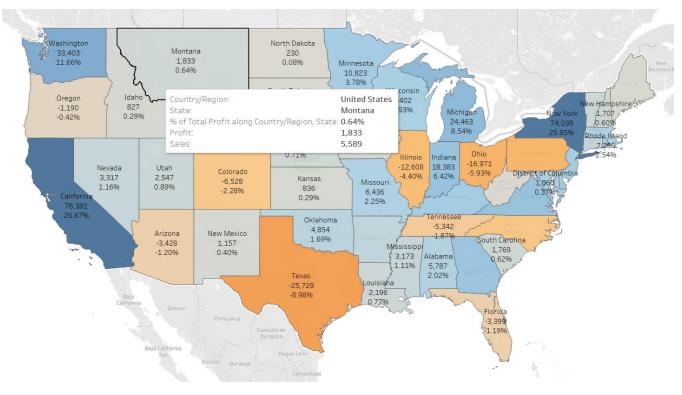
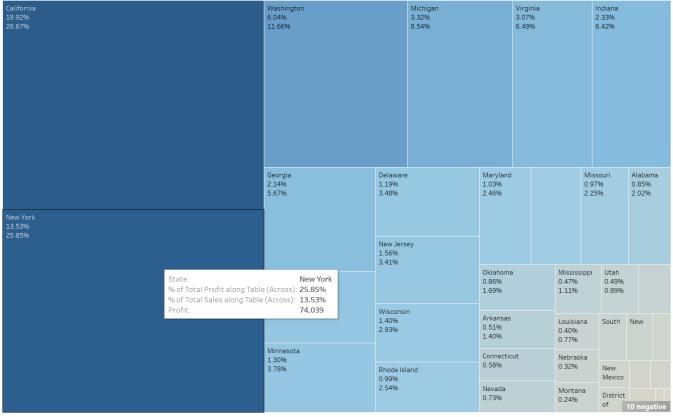
SUPER STORE SALES ANALYSIS

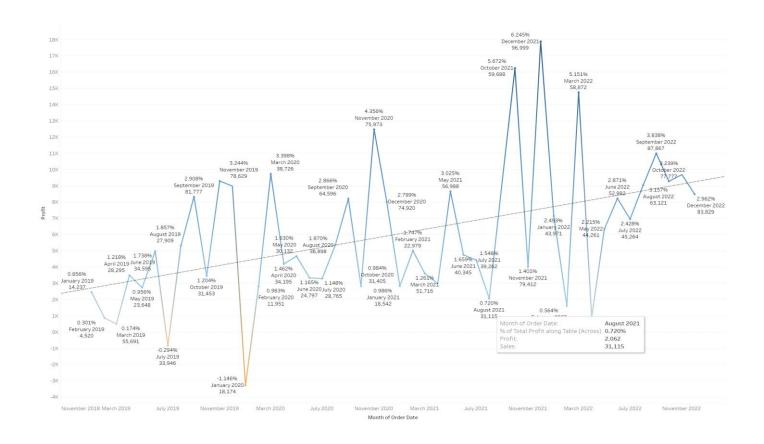
https://public.tableau.com/app/profile/sunny.panchal/viz/Super-StoreSalesANalysis/Dashboard1?publish=yes

We want to analyse the factors that influence the sales and profit of the store:

- Which state/city is getting the more sales and profit?
- Which category/sub-category is bringing more sales and profit?
- Sales and profit trend over time.

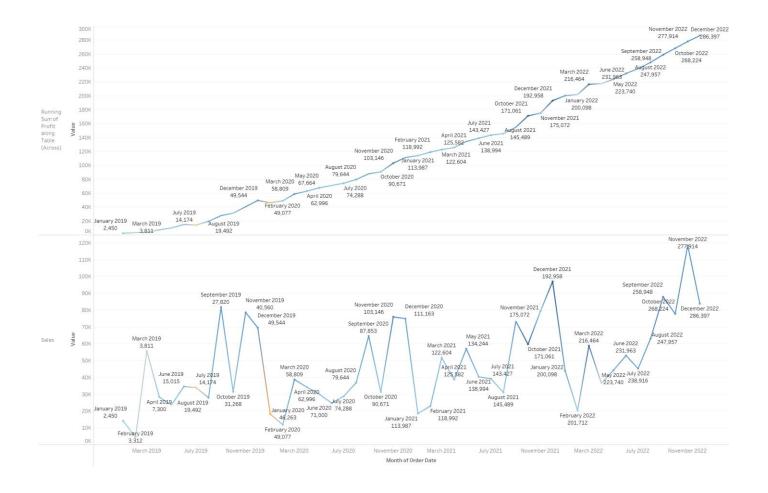




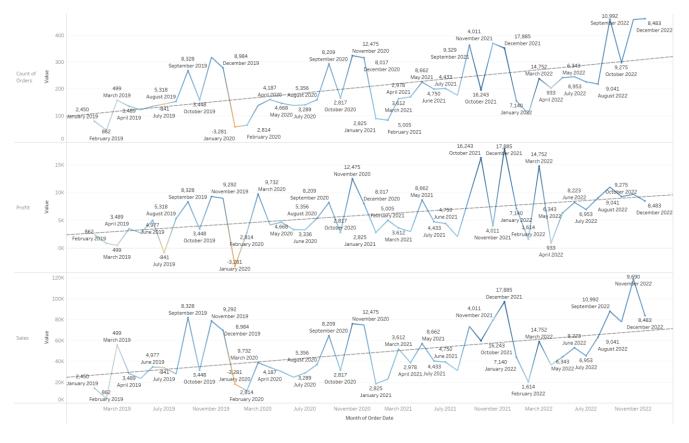


Increasing profit trend (profit cumulative)

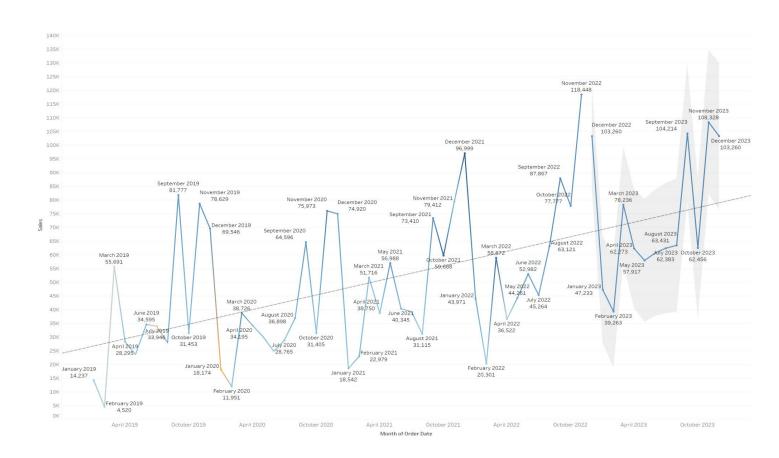
Sales over month period :



Count of orders | profit | sales trend over time :

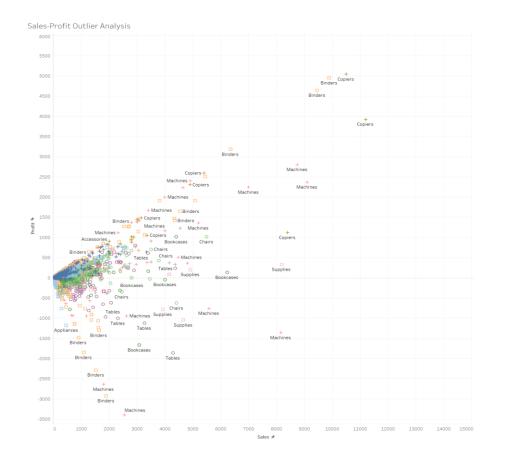


Forecasting sales:



Instances when the profit was exceptionally higher than usual:

Find outliers: (add category/sub-category level information)

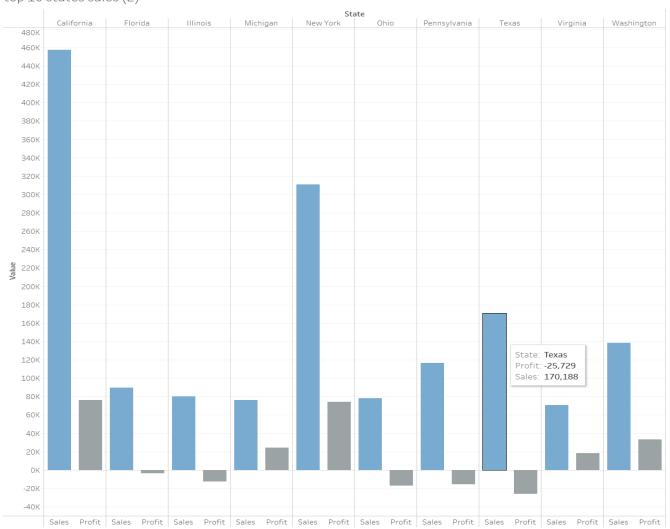




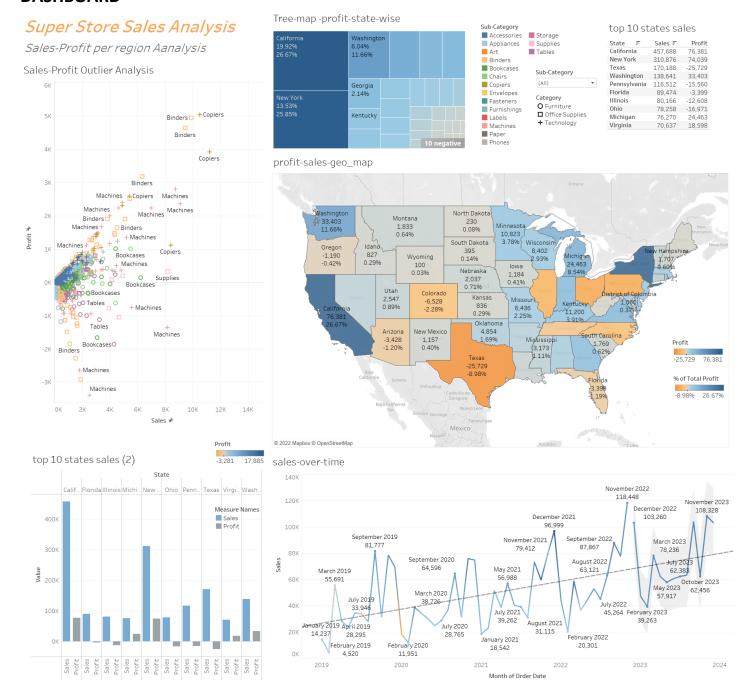
Top 10 states with highest sales:

State ₹	Sales =	Profit
California	457,688	76,381
New York	310,876	74,039
Texas	170,188	-25,729
Washington	138,641	33,403
Pennsylvania	116,512	-15,560
Florida	89,474	-3,399
Illinois	80,166	-12,608
Ohio	78,258	-16,971
Michigan	76,270	24,463
Virginia	70,637	18,598

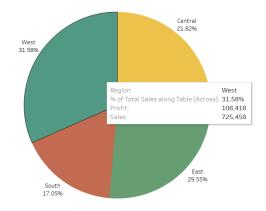
top 10 states sales (2)



DASHBOARD



By region:

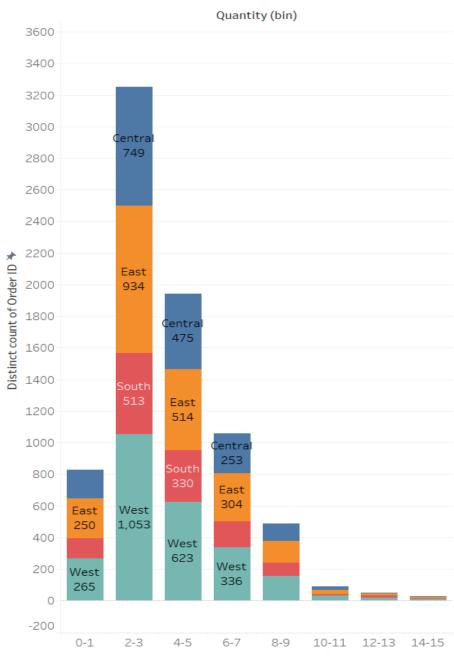


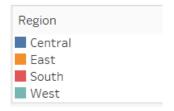
relative % of sale and profit table

Region	% of Tot	Profit	Sales
Central	21.82%	39,706	501,240
East	29.55%	91,523	678,781
South	17.05%	46,749	391,722
West	31 58%	108 418	725 458

Market-Basket-Analysis:

Histogram Qunatity





PROFIT-MARGIN:

State	Profit_Margin	F
strict of Columbia	36.98%	
Delaware	36.35%	
Minnesota	36.24%	
Vlaine	35.77%	
Arkansas	34.33%	
Indiana	34.33%	
Georgia	33.10%	
Montana	32.80%	
Rhode Island	32.20%	
Michigan	32.07%	
Kentucky	30.61%	
South Dakota	30.01%	
Maryland	29.66%	
Alabama	29.66%	
Mississippi	29.46%	
Missouri	28.99%	
Kansas	28.70%	
New Jersey	27.33%	
Nebraska	27.29%	
Virginia	26.33%	
Connecticut	26.24%	
Wisconsin	26.16%	
lowa		
	25.85%	
Vermont	25.14%	
North Dakota	25.02%	
Oklahoma	24.66%	
New Mexico	24.19%	
Washington	24.09%	
Louisiana	23.83%	
New York	23.82%	
Massachusetts	23.70%	
New Hampshire	23.40%	
Utah	22.70%	
South Carolina	20.86%	
Nevada	19.83%	
Idaho	18.86%	
California	16.69%	
West Virginia	15.37%	
Wyoming	6.25%	
Florida	-3.80%	
Oregon	-6.83%	
Arizona	-9.72%	
Pennsylvania	-13.35%	
North Carolina	-13.47%	
Texas	-15.12%	
Illinois	-15.73%	
Tennessee	-17.42%	
Colorado	-20.33%	
Ohio	-21 6006	

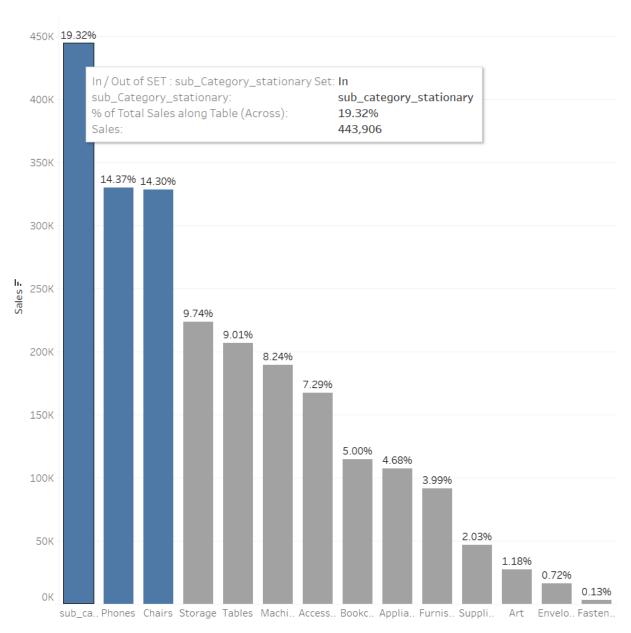
Region	Profit_Margin	
Central	7.92%	
East	13.48%	
South	11.93%	
West	14.94%	

Profit margin per product category:

Sub-Catego	Profit_Margin	
Accessories	0.250546995	
Appliances	0.168675169	
Art	0.240710833	
Binders	0.148573606	
Bookcases	-0.030227682	
Chairs	0.080956733	
Copiers	0.371955846	
Envelopes	0.422675818	
Fasteners	0.313965043	
Furnishings	0.142403579	
Labels	0.444186722	
Machines	0.017886184	
Paper	0.433918372	
Phones	0.134893270	
Storage	0.095061130	
Supplies	-0.025476952	
Tables	-0.085644604	

CREATE CUSTOM SUB-CATEGORIES GROUP AND COMPARE THEM WITH OTHER SUB-CATEGORIES

Created a set for top 3 categories



Top customers giving high revenue but low on profit:

Customer ID	Profit	Sales =	
SP-20620	\$-270.43	\$5,440.32	
AA-10315	\$-362.88	\$5,563.56	
RB-19795	\$-461.73	\$5,633.32	
CS-12505	\$-6,626.39	\$5,690.06	
CP-12340	\$-1,850.30	\$5,888.28	
VW-21775	\$-874.66	\$6,134.04	
JA-15970	\$-819.42	\$6,491.03	
JH-15985	\$-644.70	\$7,955.00	
ZC-21910	\$-1,032.15	\$8,025.71	
SB-20290	\$-2,082.75	\$8,057.89	
NF-18385	\$-1,695.97	\$8,322.83	
PF-19120	\$-614.29	\$9,062.86	
GT-14635	\$-4,108.66	\$9,351.21	
BM-11140	\$-1,659.96	\$11,789.63	
SM-20320	\$-1,980.74	\$25,043.05	

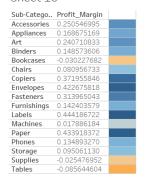
high sale low profit customers top n sale customers and bottom n profit customers

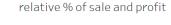
Customer ID	Profit	Sales	
AA-10315	\$-362.88	\$5,563.56	
BM-11140	\$-1,659.96	\$11,789.63	
CP-12340	\$-1,850.30	\$5,888.28	
CS-12505	\$-6,626.39	\$5,690.06	
GT-14635	\$-4,108.66	\$9,351.21	
JA-15970	\$-819.42	\$6,491.03	
JH-15985	\$-644.70	\$7,955.00	
KL-16555	\$-182.78	\$5,016.49	
LB-16795	\$-52.19	\$4,985.68	
NF-18385	\$-1,695.97	\$8,322.83	
PF-19120	\$-614.29	\$9,062.86	
RB-19795	\$-461.73	\$5,633.32	
SB-20290	\$-2,082.75	\$8,057.89	
SC-20770	\$-671.19	\$4,492.66	
SM-20320	\$-1,980.74	\$25,043.05	
SP-20620	\$-270.43	\$5,440.32	
TB-21520	\$-1,603.05	\$4,737.49	
TP-21415	\$-1,087.39	\$5,329.00	
VW-21775	\$-874.66	\$6,134.04	
ZC-21910	\$-1,032.15	\$8,025.71	

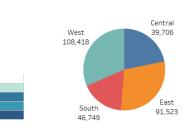


Sheet 16

Functional Analysis









stationary_sub_group

sub_Category_stationary

Profit_Margin

Region Central

East

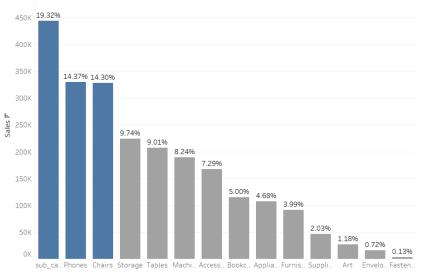
West

0.07922 0.14945

profit-margin

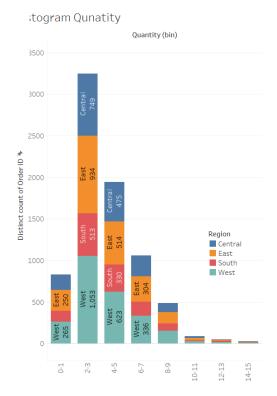
Profit_Margin

7.92% 13.48%



set_diameter

150



high sale low profit customers top n sale customers and bottom n profit customers

bottom i pront customers						
Customer ID	Profit	Sales				
AA-10315	\$-362.88	\$5,563.56				
BM-11140	\$-1,659.96	\$11,789.63				
CP-12340	\$-1,850.30	\$5,888.28				
CS-12505	\$-6,626.39	\$5,690.06				
GT-14635	\$-4,108.66	\$9,351.21				
JA-15970	\$-819.42	\$6,491.03				
JH-15985	\$-644.70	\$7,955.00				
KL-16555	\$-182.78	\$5,016.49				
LB-16795	\$-52.19	\$4,985.68				
NF-18385	\$-1,695.97	\$8,322.83				
PF-19120	\$-614.29	\$9,062.86				
RB-19795	\$-461.73	\$5,633.32				
SB-20290	\$-2,082.75	\$8,057.89				
SC-20770	\$-671.19	\$4,492.66				
SM-20320	\$-1,980.74	\$25,043.05				
SP-20620	\$-270.43	\$5,440.32				
TB-21520	\$-1,603.05	\$4,737.49				
TP-21415	\$-1,087.39	\$5,329.00				
VW-21775	\$-874.66	\$6,134.04				
ZC-21910	\$-1,032.15	\$8,025.71				



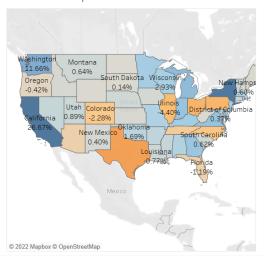
State	Profit_Margin	₹
District of Columbia	36.98%	
Delaware	36.35%	
Minnesota	36.24%	
Maine	35.77%	
Arkansas	34.33%	
Indiana	34.33%	
Georgia	33.10%	
Montana	32.80%	
Rhode Island	32.20%	
Michigan	32.07%	
Kentucky	30.61%	
South Dakota	30.01%	
Maryland	29.66%	
Alabama	29.66%	
Mississippi	29.46%	
Missouri	28.99%	
Kansas	28.70%	
New Jersey	27.33%	
Nebraska	27.29%	
Virginia	26.220%	

Profit

-25.729

76.381

USA - Heatmap - Profit



Revenue and profit lost after customer have returned the ordered items

Category	Sub-Catego	Count of Order ID (Returns)	Returned_sales	Non returned sales	Profit
Furniture	Bookcases	51	\$ 22,777.53	\$ 107,435.36	\$ -3,655.38
	Chairs	238	\$ 147,380.25	\$ 303,294.40	\$ 40,324.36
	Furnishings	266	\$ 27,896.11	\$ 82,127.61	\$ 17,948.80
	Tables	116	\$ 63,237.34	\$ 189,923.25	\$ -23,067.41
Office	Appliances	177	\$ 57,207.35	\$ 97,402.38	\$30,201.00
Supplies	Art	177	\$ 4,433.73	\$ 25,689.67	\$7,249.04
	Binders	552	\$ 47,707.62	\$ 193,429.58	\$ 18,058.36
	Envelopes	50	\$ 3,420.94	\$ 15,556.66	\$8,104.10
	Fasteners	94	\$ 987.61	\$ 2,811.19	\$1,282.22
	Labels	80	\$ 4,383.16	\$ 11,600.45	\$7,154.22
	Paper	487	\$ 27,341.18	\$ 71,338.92	\$ 43,235.74
	Storage	233	\$ 57,464.56	\$ 209,163.68	\$ 25,673.79
	Supplies	69	\$ 7,807.85	\$ 43,477.58	\$ -923.02
Technology	Accessories	251	\$ 47,580.66	\$ 154,663.99	\$ 49,993.13
	Copiers	21	\$ 66,959.36	\$ 130,328.19	\$ 76,303.64
	Machines	55	\$ 61,112.22	\$ 176,080.24	\$6,194.26
	Phones	309	\$ 137,282.71	\$ 302,373.44	\$ 56,052.66

Show the % contribution of every sub_category for its category :

Category	Sub-Catego	Profit	Sales	CategoryLevel	% contribution per sub category	
Furniture	Bookcases	\$ -3,655.38	\$ 130,212.89	\$ 944,071.86	13.79%	13.79%
	Chairs	\$ 40,324.36	\$ 450,674.65	\$ 944,071.86	47.74%	47.74%
	Furnishings	\$ 17,948.80	\$110,023.72	\$ 944,071.86	11.65%	11.65%
	Tables	\$-23,067.41	\$ 253,160.59	\$ 944,071.86	26.82%	26.82%
Office	Appliances	\$30,201.00	\$ 154,609.73	\$881,224.11	17.54%	17.54%
Supplies	Art	\$ 7,249.04	\$30,123.40	\$881,224.11	3.42%	3.42%
	Binders	\$ 18,058.36	\$ 241,137.20	\$881,224.11	27.36%	27.36%
	Envelopes	\$8,104.10	\$ 18,977.60	\$881,224.11	2.15%	2.15%
	Fasteners	\$ 1,282.22	\$ 3,798.80	\$881,224.11	0.43%	0.43%
	Labels	\$ 7,154.22	\$15,983.61	\$881,224.11	1.81%	1.81%
	Paper	\$ 43,235.74	\$98,680.11	\$881,224.11	11.20%	11.20%
	Storage	\$ 25,673.79	\$ 266,628.24	\$881,224.11	30.26%	30.26%
	Supplies	\$-923.02	\$ 51,285.43	\$881,224.11	5.82%	5.82%
Technology	Accessories	\$49,993.13	\$ 202,244.64	\$1,076,380.80	18.79%	18.79%
	Copiers	\$ 76,303.64	\$ 197,287.55	\$1,076,380.80	18.33%	18.33%
	Machines	\$6,194.26	\$237,192.46	\$1,076,380.80	22.04%	22.04%
	Phones	\$ 56,052.66	\$ 439,656.15	\$1,076,380.80	40.85%	40.85%

Show the % contribution of every State for its region :

Region	State	Profit	Sales	StateLevelSales	% contribution of state per region 🗧	
Central	Texas			\$ 531,552.34	36.45%	
	Illinois			\$ 531,552.34	15.70%	
	Michigan			\$ 531,552.34	14.82%	
	Indiana	\$ 18,382.94	\$ 53,555.36	\$ 531,552.34	10.08%	
	Wisconsin	\$8,602.37	\$ 32,735.72	\$ 531,552.34	6.16%	
	Minnesota	\$10,843.46	\$ 29,906.15	\$ 531,552.34	5.63%	
	Missouri	\$6,436.21	\$ 22,205.15	\$ 531,552.34	4.18%	
	Oklahoma	\$ 4,994.93	\$ 19,987.03	\$ 531,552.34	3.76%	
	Nebraska	\$ 2,037.09	\$ 7,464.93	\$ 531,552.34	1.40%	
	lowa	\$ 1,183.81	\$ 4,579.76	\$ 531,552.34	0.86%	
	Kansas	\$836.44	\$ 2,914.31	\$ 531,552.34	0.55%	
	South Dakota	\$ 394.83	\$ 1,315.56	\$ 531,552.34	0.25%	
	North Dakota	\$ 230.15	\$919.91	\$ 531,552.34	0.17%	
East	New York	\$ 112,383.09	\$ 464,693.38	\$890,956.82	52.16%	
	Pennsylvania	\$ -18,256.56	\$135,694.86	\$890,956.82	15.23%	
	Ohio	\$ -24,294.11	\$ 96,218.98	\$890,956.82	10.80%	
	Massachusetts	\$ 9,974.96	\$40,838.76	\$890,956.82	4.58%	
	New Jersey	\$ 9,974.78	\$ 36,236.25	\$890,956.82	4.07%	
	Delaware	\$11,613.70	\$32,399.18	\$890,956.82	3.64%	
	Maryland	\$7,400.41	\$ 25,246.82	\$890,956.82	2.83%	
	Rhode Island	\$ 7,258.47	\$ 23,227.86	\$890,956.82	2.61%	
	Connecticut	\$3,511.49	\$13,384.36	\$890,956.82	1.50%	
	Vermont	\$ 2,244.98		\$890,956.82	1.00%	
	New Hampshire	\$1,995.84	\$8,741.62	\$890,956.82	0.98%	
	District of Columbia	\$1,059.59	\$ 2,865.02	\$890,956.82	0.32%	
	Maine	\$ 454.49	\$1,270.53	\$890,956.82	0.14%	
	West Virginia	\$ 185.92	\$1,209.82	\$890,956.82	0.14%	
South	Florida	\$-3,612.92	\$ 94,269.96	\$ 443,176.76	21.27%	
	Virginia	\$20,016.89		\$ 443,176.76	17.32%	
	North Carolina			\$ 443,176.76	14.73%	
	Georgia			\$ 443,176.76	12.17%	
	Tennessee	\$ -4,426.06	\$53,380.31	\$ 443,176.76	12.04%	
	Kentucky	\$11,886.38	\$ 39,271.02	\$ 443,176.76	8.86%	
	Alabama	\$5,833.41		\$ 443,176.76	4.44%	
	Arkansas	\$4,008.69		\$ 443,176.76	2.64%	
	Mississippi	\$3,344.23		\$ 443,176.76	2.52%	
	Louisiana	\$2,196.10	\$9,217.03	\$ 443,176.76	2.08%	
	South Carolina	\$1,769.06	\$8,481.71	\$ 443,176.76	1.91%	
West	California	\$116,475.32	\$671,594.98	\$ 1,035,990.85	64.83%	
	Washington			\$ 1,035,990.85	17.85%	
	Arizona			\$ 1,035,990.85	4.94%	
	Colorado			\$ 1,035,990.85	4.72%	
	Utah	\$5,707.36		\$1,035,990.85	2.18%	
	Oregon	\$-3,148.05		\$ 1,035,990.85	2.17%	
	Nevada	\$3,316.77		\$ 1,035,990.85	1.61%	
	Montana	\$1,854.14	\$5,633.01	\$1,035,990.85	0.54%	
	Idaho	\$1,009.76	\$ 5,383.68	\$ 1,035,990.85	0.52%	
	New Mexico	\$1,159.41	\$4,840.79	\$ 1,035,990.85	0.47%	
	Wyoming	\$ 100.20	\$1,603.14	\$1,035,990.85	0.15%	

Cumulatively calculated profit and sale over time Over the year and overall .

	. Month of Or	Profit		Running sum of sales along Pane (Down)	
2019	January	2,465	2,465	14,276	14,276
	February	858	3,323	18,807	18,807
	March	670	3,993		74,912
	April	3,694	7,687	103,841	103,841
	May	2,943	10,631	128,823	128,823
	June	4,977	15,607	163,418	163,418
	July	-19,481	-3,873	212,586	212,586
	August	9,543	5,670	257,758	257,758
	September	21,524	27,193	378,303	378,303
	October	3,307	30,500	410,342	410,342
	November	10,709	41,209	494,298	494,298
	December	10,775	51,984	575,456	575,456
2020	January	-8,037	-8,037	25,516	600,972
	February	3,547	-4,490	40,577	616,033
	March	10,463	5,973	82,050	657,506
	April	5,971	11,944	122,630	698,086
	May	9,593	21,536	168,349	743,805
	June	3,384	24,921	193,774	769,230
	July	3,289	28,209	222,539	797,995
	August	6,631	34,840	268,920	844,376
	September	9,434	44,273	339,082	914,538
	October	5,509	49,782	394,286	969,741
	November	13,146	62,928	481,210	1,056,666
	December	9,520	72,448	579,873	1,155,328
2021	January	3,258	3,258	20,736	1,176,064
	February	5,005	8,263	43,715	1,199,043
	March	4,396	12,659	98,551	1,253,879
	April	-325	12,334	144,853	1,300,182
	May	10,136	22,470	218,023	1,373,352
	June	5,400	27,870	265,235	1,420,563
	July	4,623	32,493	314,683	1,470,012
	August	3,203	35,696	349,299	1,504,628
	September	10,962	46,659	441,426	1,596,755
	October	14,067	60,726	507,003	1,662,331
	November	4,212	64,938	589,114	1,744,442
	December	19,945	84,882	715,220	1,870,549
2022	January	7,248	7,248	45,234	1,915,783
	February	2,514	9,763	81,586	1,952,135
	March	29,309	39,072	178,554	2,049,103
	April	1,340	40,412	218,540	2,089,089
	May	6,343	46,755	262,801	2,133,350
	June	10,040	56,794	336,213	2,206,762
	July	8,231	65,025	387,973	2,258,521
	August	22,431	87,456	503,072	2,373,621
	September	30,844	118,300	712,265	2,582,814
	October	12,245	130,545	805,401	2,675,950
	November	11,462	142,007	934,717	2,805,266
	December	8,809	150,816	1,031,128	2,901,677

each year last running calculations shows the end of the year sale and profit (2^{nd} and 3^{rd} columns.)