

DATA ANALYSIS

Final Project

Stores data analysis

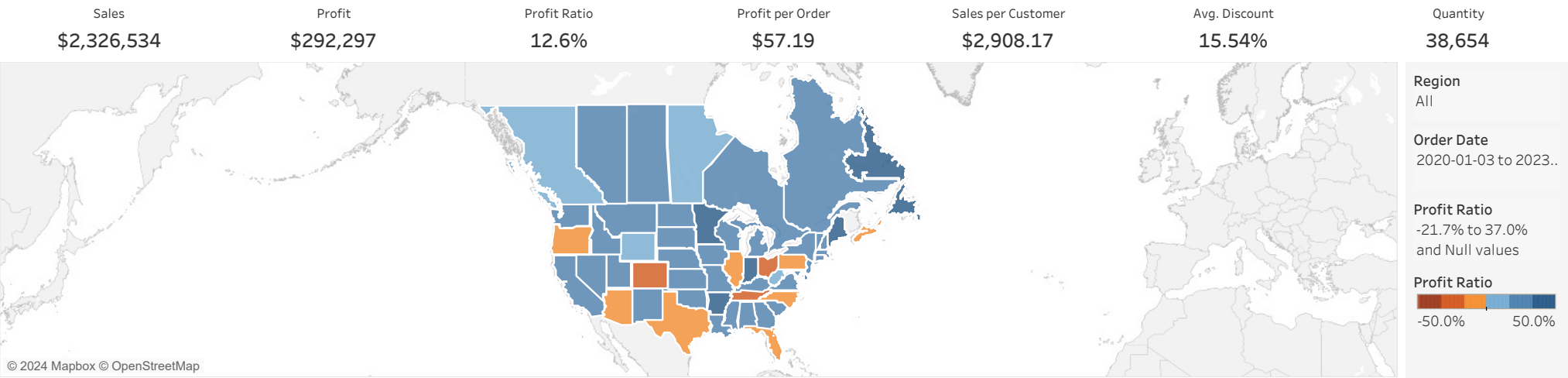
Tools used: Excel and Tableau

By: Vignesh Ramasubramanian

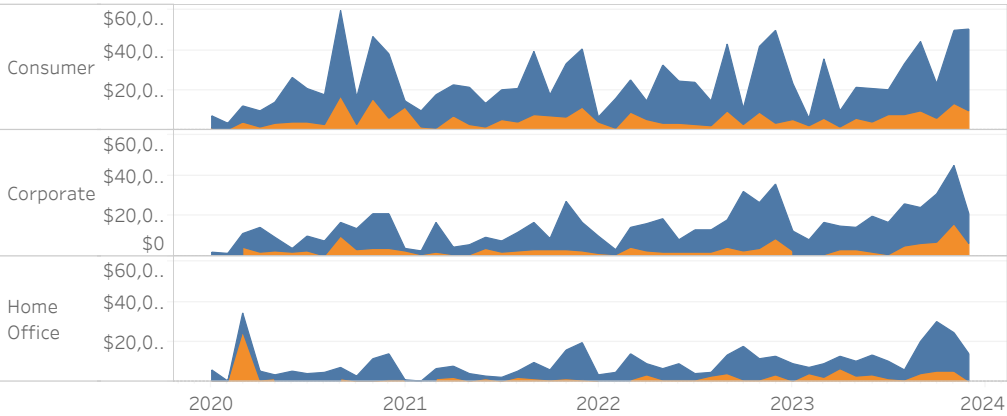
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Dashboard

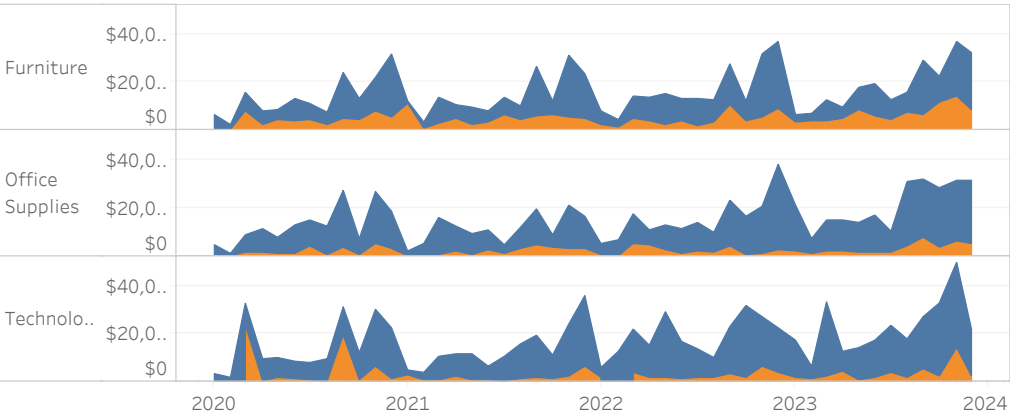
Executive Overview - Profitability (All)



Monthly Sales by Segment - States/Provinces: All



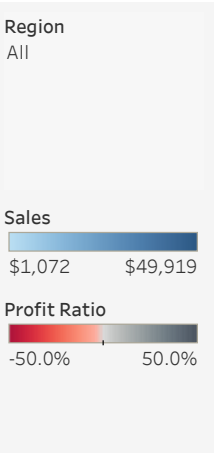
Monthly Sales by Product Category - States/Provinces: All



Product Drilldown

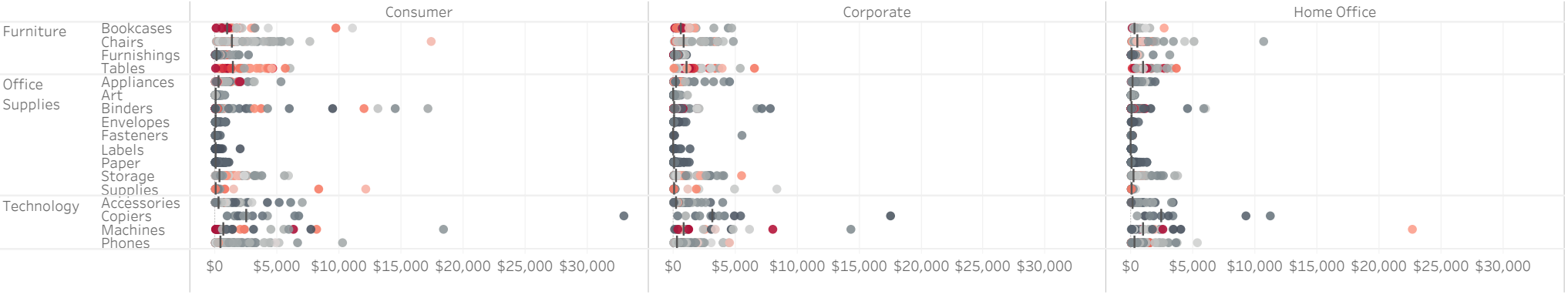
Sales by Product Category

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Furniture	20..	\$6,308	\$1,840	\$15,817	\$7,945	\$8,505	\$13,206	\$10,821	\$7,320	\$23,816	\$13,136	\$21,763	\$31,648
	20..	\$11,805	\$3,134	\$13,743	\$10,476	\$9,419	\$7,714	\$13,674	\$9,639	\$26,273	\$12,027	\$30,881	\$23,546
	20..	\$7,688	\$3,926	\$14,116	\$13,291	\$15,160	\$13,231	\$13,116	\$12,483	\$27,327	\$11,889	\$31,784	\$36,970
	20..	\$6,029	\$6,866	\$12,369	\$9,323	\$17,483	\$19,009	\$12,476	\$15,442	\$29,097	\$22,246	\$37,057	\$31,917
Office Supplies	20..	\$4,858	\$1,072	\$8,606	\$11,155	\$7,872	\$13,027	\$15,121	\$12,388	\$27,487	\$7,298	\$26,862	\$18,267
	20..	\$1,822	\$5,368	\$15,892	\$12,559	\$9,185	\$10,648	\$4,720	\$11,894	\$19,337	\$8,673	\$21,218	\$16,355
	20..	\$5,313	\$6,794	\$17,347	\$10,647	\$13,050	\$11,334	\$13,915	\$9,561	\$23,311	\$16,403	\$20,487	\$38,210
	20..	\$21,287	\$7,408	\$14,931	\$15,072	\$13,763	\$16,986	\$10,304	\$31,069	\$31,946	\$28,334	\$31,479	\$31,256
Technology	20..	\$3,353	\$1,609	\$32,511	\$9,195	\$9,943	\$8,436	\$8,004	\$9,210	\$31,367	\$11,979	\$30,201	\$22,093
	20..	\$4,835	\$3,449	\$10,344	\$11,161	\$11,643	\$6,435	\$10,371	\$15,525	\$19,017	\$10,707	\$23,874	\$35,632
	20..	\$5,830	\$12,259	\$21,568	\$14,891	\$28,833	\$16,372	\$13,269	\$9,672	\$22,883	\$31,540	\$27,141	\$22,323
	20..	\$16,943	\$6,027	\$33,429	\$12,383	\$13,910	\$17,061	\$23,210	\$17,619	\$27,022	\$32,895	\$49,919	\$22,002

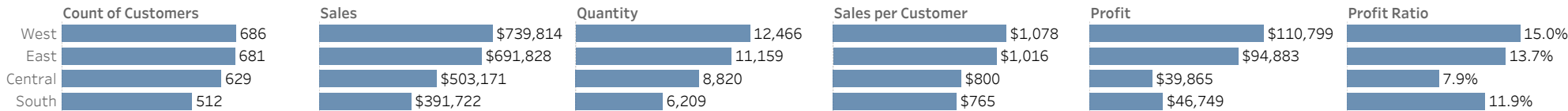


Sales and Profit by Product Names

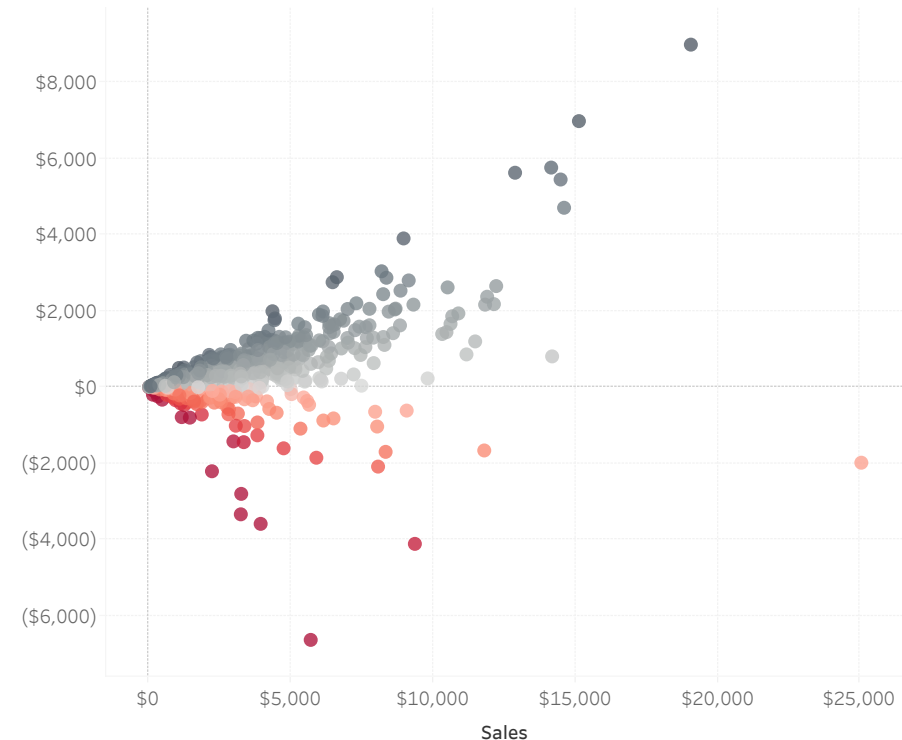
Year: All, Month: All, Product Category: All



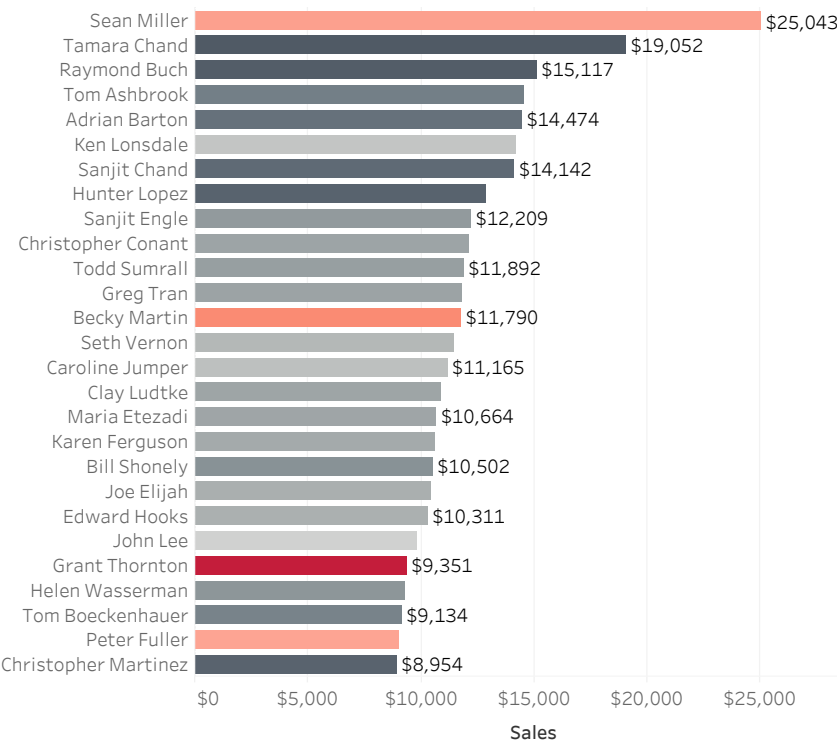
Customer Analysis



Sales and Profit by Customer



Customer Ranking



Year

All

Category

- ☒ Furniture
- ☒ Office Supplies
- ☒ Technology

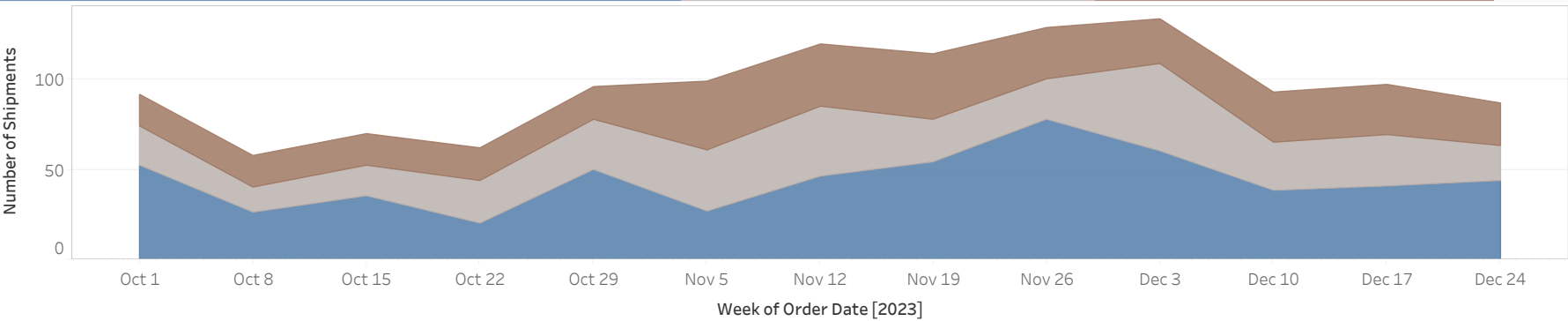
Segment

- ☒ Consumer
- ☒ Corporate
- ☒ Home Office

Profit Ratio

-50.0% 50.0%

On-Time Shipment Trends



Order Year

- 2020
- 2021
- 2022
- 2023

Order Quarter

- Q1
- Q2
- Q3
- Q4

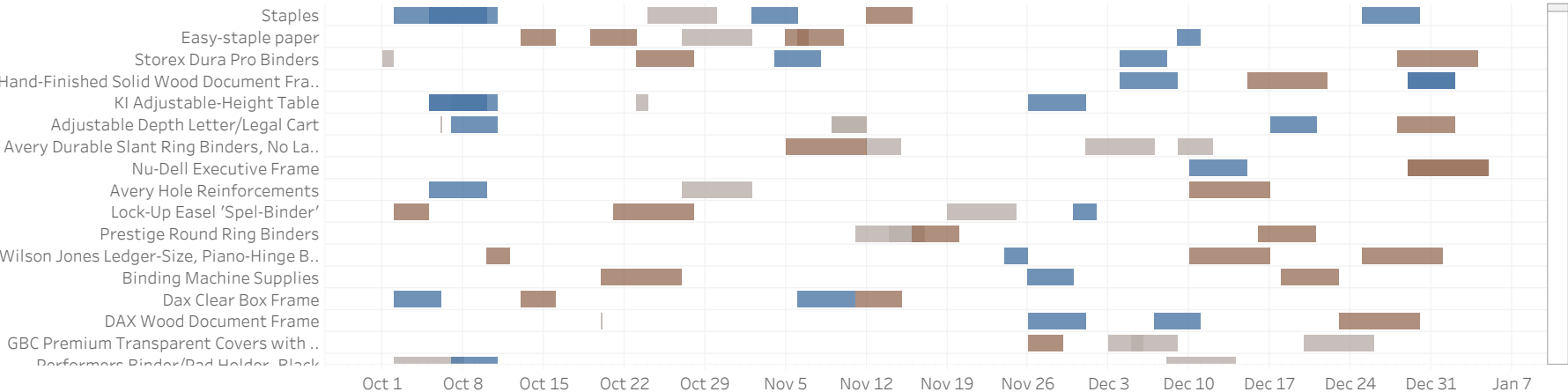
Region

All

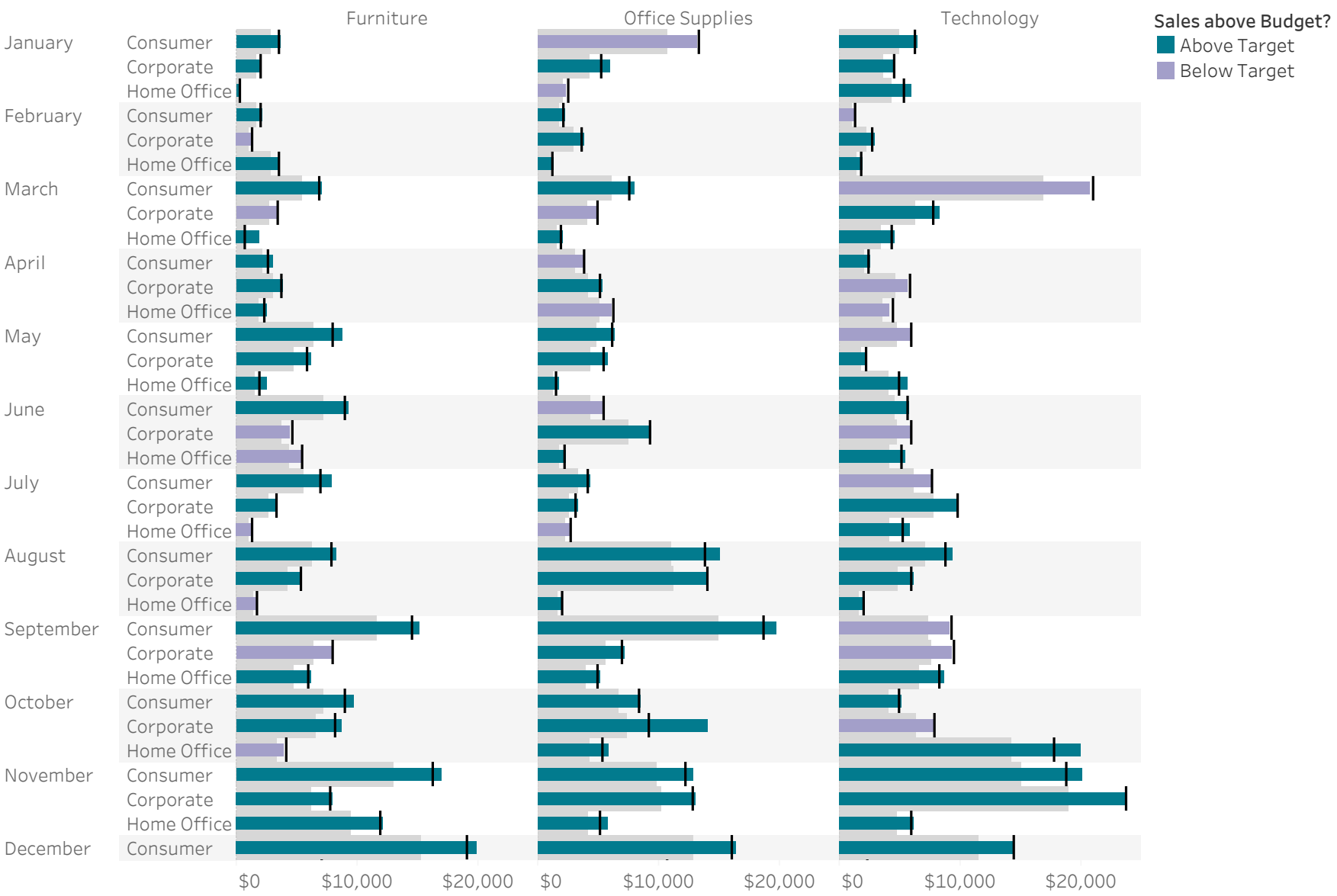
Ship Mode

All

Days to Ship by Product for Q4 of 2023

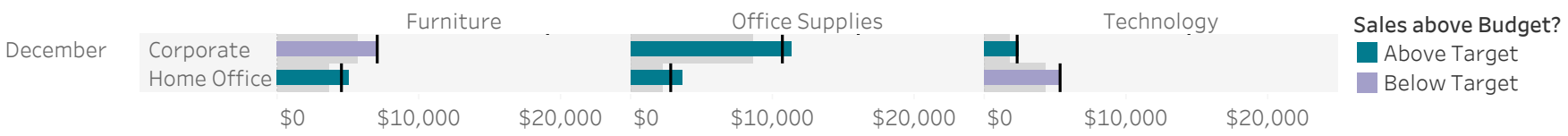


Sales Performance vs Target



Sum of Sales for each Segment broken down by Category vs. Order Date Year and Order Date Month. Color shows details about Sales above Target?. The data is filtered on Region, which keeps Central, East, South and West. The view is filtered on Order Date Year, which keeps 2023.

Sales Performance vs Target



Sum of Sales for each Segment broken down by Category vs. Order Date Year and Order Date Month. Color shows details about Sales above Target?. The data is filtered on Region, which keeps Central, East, South and West. The view is filtered on Order Date Year, which keeps 2023.

Sales Commission Model

Enter new quota, commission rate, and base salary to estimate sales and compensation.

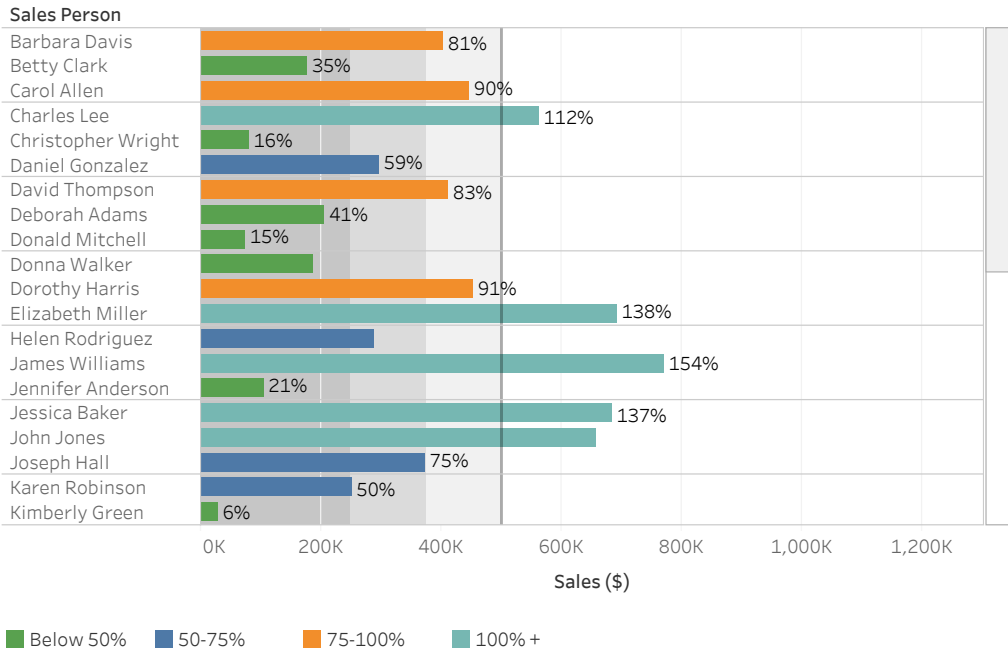
New quota\$500K

Base salary\$50,000

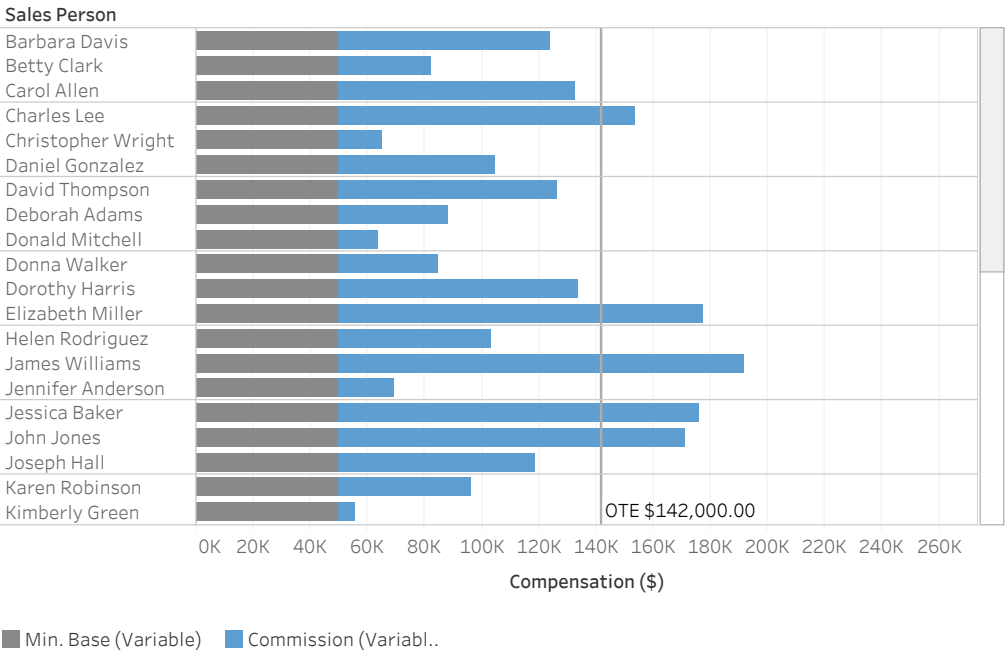
Sort byNames

Commission rate18.4%

Estimated Quota Attainment Results with These Assumptions



Total Compensation with These Assumptions



Estimated Sales:	Estimated Compensation:
Sales	OTE (Variable)
\$15.36M	\$5.82M
% of quota achieved	Avg. OTE (Variable)
75%	\$142K

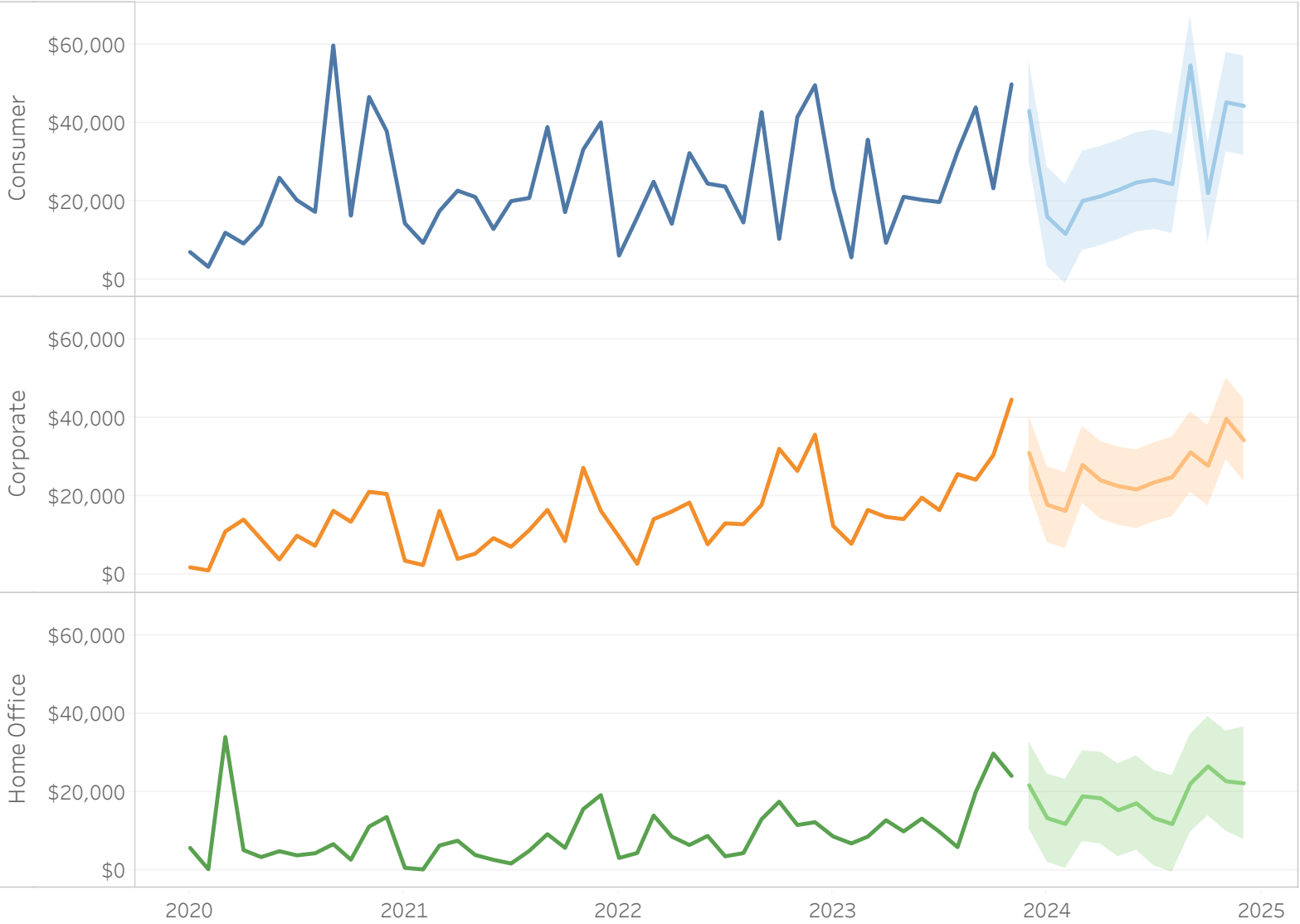
Order Details

Order Date	Region	State/Province	City	Category	Segment
2020-01-03 to 2023-12-30	All	All	All	All	All

Product Detail Sheet

Order ID	Customer Name	Order Date	Ship Date	Ship Mode	Sales	Quantity	Discount	Profit	Profit Ratio	Days to Ship Sche..	Days to Ship Actual
CA-2020-100867	Eugene Hildebrand	2020-10-19	2020-10-24	Standard Class	\$33	3	0%	\$9	26.0%	6	5
CA-2020-107153	George Zrebassa	2020-09-28	2020-10-03	Standard Class	\$11	2	20%	\$4	35.0%	6	5
CA-2020-115238	Jane Waco	2020-01-21	2020-01-24	Standard Class	\$281	22	0%	\$89	31.7%	30	15
CA-2020-115777	Doug O'Connell	2020-08-19	2020-08-24	Standard Class	\$388	1	0%	\$182	47.0%	6	5
CA-2020-117964	Michael Knudson	2020-12-02	2020-12-06	Standard Class	\$56	12	80%	(\$19)	-32.9%	12	8
CA-2020-119508	Tracy Zic	2020-12-04	2020-12-09	Standard Class	\$42	11	0%	\$15	36.4%	12	10
CA-2020-123625	Bruce Galang	2020-12-29	2021-01-02	Standard Class	\$258	17	0%	\$88	34.2%	24	16
CA-2020-123664	Neil Cohen	2020-12-02	2020-12-06	Standard Class	\$58	5	60%	(\$25)	-42.5%	6	4
CA-2020-125388	Michael Paige	2020-10-19	2020-10-23	Standard Class	\$174	7	20%	\$26	15.2%	12	8
CA-2020-126438	Alex Russell	2020-09-10	2020-09-13	First Class	\$15	2	0%	\$4	25.0%	1	3
CA-2020-126634	Alan Barnes	2020-12-20	2020-12-22	Second Class	\$94	5	0%	\$40	42.0%	3	2
CA-2020-129322	Denny Blanton	2020-08-08	2020-08-10	Second Class	\$601	11	0%	\$255	42.5%	9	6
CA-2020-131807	Greg Guthrie	2020-10-05	2020-10-10	Standard Class	\$753	22	60%	(\$14)	-1.9%	36	30
CA-2020-132339	Jennifer Braxton	2020-08-19	2020-08-23	Standard Class	\$19	3	0%	\$9	48.0%	6	4
CA-2020-139675	Nicole Fjeld	2020-03-13	2020-03-18	Second Class	\$1,243	12	20%	\$195	15.7%	6	10
CA-2020-141531	Bruce Galang	2020-12-29	2021-01-02	Standard Class	\$88	7	0%	\$30	34.2%	12	8
CA-2020-143500	Harry Olson	2020-12-30	2021-01-03	Standard Class	\$3	3	20%	(\$1)	-20.0%	6	4
CA-2020-146626	James Peterman	2020-12-29	2021-01-05	Standard Class	\$20	5	0%	\$10	49.0%	6	7
CA-2020-151799	Ben Ferrer	2020-12-14	2020-12-18	Standard Class	\$1,843	14	30%	\$432	23.5%	30	20
CA-2020-152443	Frank Gastineau	2020-05-21	2020-05-26	Standard Class	\$712	16	0%	\$297	41.7%	18	15
CA-2020-153623	James Peterman	2020-11-24	2020-12-05	Standard Class	\$198	16	0%	\$71	35.7%	12	22
CA-2020-153738	Alejandro Grove	2020-09-20	2020-09-22	First Class	\$38	6	0%	\$17	45.0%	1	2
CA-2020-160325	Bart Pistole	2020-09-24	2020-09-24	Same Day	\$830	5	0%	\$241	29.1%	0	0
CA-2020-166086	Carol Triggs	2020-05-07	2020-05-12	Standard Class	\$1,091	12	30%	\$216	19.8%	24	20
CA-2020-166695	Chuck Clark	2020-05-20	2020-05-24	Standard Class	\$868	10	40%	(\$55)	-6.4%	18	12
CA-2020-184712	Neil Cohen	2020-06-18	2020-06-20	Second Class	\$74	3	20%	\$23	31.3%	3	2
CA-2021-112224	Neil Cohen	2021-12-02	2021-12-06	Standard Class	\$58	5	60%	(\$25)	-42.5%	6	4
CA-2021-115238	Jane Waco	2021-01-21	2021-01-24	Standard Class	\$281	22	0%	\$89	31.7%	30	15
CA-2021-119508	Tracy Zic	2021-12-04	2021-12-09	Standard Class	\$402	6	10%	\$79	19.6%	12	10
CA-2021-129322	Denny Blanton	2021-08-08	2021-08-10	Second Class	\$159	5	60%	\$16	10.0%	9	6
CA-2021-132548	Carol Triggs	2021-05-07	2021-05-12	Standard Class	\$115	20	60%	\$9	8.0%	24	20
CA-2021-139675	Nicole Fjeld	2021-03-13	2021-03-18	Second Class	\$1,243	12	20%	\$195	15.7%	6	10

Sales Forecast



The trend of sum of Sales (actual & forecast) for Order Date Month broken down by Segment. Color shows details about Segment and Forecast indicator. The data is filtered on Region and Order Date. The Region filter keeps Central, East, South and West. The Order Date filter ranges from 2020-01-03 to 2023-12-30.

What if Forecast Based on All Sales (60% Growth, 6.40% Churn)

Region	Segment		Q1				Q2				Measure Names
			January	February	March	Total	April	May	June	Total	
Central	Consumer	Sales	\$16,479	\$4,078	\$24,791	\$45,347	\$13,723	\$16,225	\$11,085	\$41,033	Sales
		Sales Forecast	\$24,679	\$6,107	\$37,126	\$67,912	\$20,552	\$24,299	\$16,600	\$61,451	
	Corporate	Sales	\$13,060	\$1,712	\$9,109	\$23,880	\$5,885	\$15,102	\$8,527	\$29,514	Sales Forecast
		Sales Forecast	\$19,558	\$2,563	\$13,641	\$35,762	\$8,813	\$22,616	\$12,770	\$44,200	
	Home	Sales	\$2,145	\$2,422	\$7,317	\$11,884	\$6,592	\$4,678	\$13,268	\$24,538	Sales
	Office	Sales Forecast	\$3,212	\$3,627	\$10,958	\$17,797	\$9,872	\$7,006	\$19,870	\$36,748	
	Total	Sales	\$31,683	\$8,211	\$41,216	\$81,111	\$26,200	\$36,005	\$32,879	\$95,084	Sales Forecast
		Sales Forecast	\$47,449	\$12,297	\$61,725	\$121,472	\$39,237	\$53,921	\$49,240	\$142,399	
East	Consumer	Sales	\$7,151	\$8,932	\$20,448	\$36,532	\$12,618	\$34,207	\$28,256	\$75,082	Sales
		Sales Forecast	\$10,710	\$13,376	\$30,624	\$54,710	\$18,897	\$51,229	\$42,316	\$112,442	
	Corporate	Sales	\$7,383	\$4,184	\$12,777	\$24,345	\$15,146	\$7,431	\$11,289	\$33,866	Sales Forecast
		Sales Forecast	\$11,056	\$6,267	\$19,135	\$36,459	\$22,683	\$11,128	\$16,906	\$50,717	
	Home	Sales	\$1,961	\$1,665	\$3,889	\$7,515	\$11,140	\$3,801	\$6,297	\$21,239	Sales
	Office	Sales Forecast	\$2,937	\$2,493	\$5,824	\$11,255	\$16,683	\$5,693	\$9,431	\$31,807	
	Total	Sales	\$16,495	\$14,781	\$37,115	\$68,391	\$38,905	\$45,439	\$45,842	\$130,186	Sales Forecast
		Sales Forecast	\$24,703	\$22,136	\$55,583	\$102,423	\$58,263	\$68,050	\$68,653	\$194,967	
South	Consumer	Sales	\$12,089	\$15,050	\$14,914	\$42,054	\$11,286	\$14,668	\$13,167	\$39,122	Sales
		Sales Forecast	\$18,105	\$22,539	\$22,336	\$62,979	\$16,902	\$21,967	\$19,719	\$58,589	
	Corporate	Sales	\$3,950	\$2,257	\$10,558	\$16,765	\$13,796	\$11,695	\$11,205	\$36,695	Sales Forecast
		Sales Forecast	\$5,916	\$3,380	\$15,811	\$25,107	\$20,660	\$17,515	\$16,780	\$54,955	
	Home	Sales	\$7,147	\$3,675	\$28,643	\$39,464	\$5,235	\$4,304	\$1,130	\$10,669	Sales
	Office	Sales Forecast	\$10,703	\$5,503	\$42,896	\$59,102	\$7,839	\$6,445	\$1,693	\$15,977	
	Total	Sales	\$23,186	\$20,981	\$54,115	\$98,283	\$30,316	\$30,667	\$25,502	\$86,486	Sales Forecast
		Sales Forecast	\$34,723	\$31,422	\$81,043	\$147,188	\$45,402	\$45,927	\$38,192	\$129,521	
West	Consumer	Sales	\$14,722	\$5,766	\$29,707	\$50,195	\$17,554	\$23,094	\$30,943	\$71,591	Sales
		Sales Forecast	\$22,048	\$8,635	\$44,489	\$75,172	\$26,289	\$34,585	\$46,341	\$107,215	
	Corporate	Sales	\$3,543	\$6,422	\$25,796	\$35,761	\$14,406	\$13,081	\$9,876	\$37,363	Sales Forecast
		Sales Forecast	\$5,305	\$9,618	\$38,633	\$53,556	\$21,575	\$19,590	\$14,790	\$55,955	
	Home	Sales	\$6,440	\$3,589	\$22,722	\$32,752	\$10,717	\$10,479	\$8,417	\$29,613	Sales
	Office	Sales Forecast	\$9,645	\$5,375	\$34,029	\$49,049	\$16,050	\$15,693	\$12,605	\$44,348	
	Total	Sales	\$24,705	\$15,777	\$78,226	\$118,708	\$42,678	\$46,653	\$49,236	\$138,568	Sales Forecast
		Sales Forecast	\$36,998	\$23,628	\$117,151	\$177,777	\$63,914	\$69,868	\$73,736	\$207,519	
Grand Total	Sales		\$96,070	\$59,751	\$210,672	\$366,493	\$138,099	\$158,765	\$153,460	\$450,324	Sales
	Sales Forecast		\$143,874	\$89,483	\$315,503	\$548,860	\$206,817	\$237,767	\$229,822	\$674,405	

Change the Growth Rate and Churn Rate to better understand their impact on sales forecasts

What if Forecast Based on All Sales (60% Growth, 6.40% Churn)

Region	Segment		Q3				Q4				Measure Names
			July	August	September	Total	October	November	December	Total	
Central	Consumer	Sales	\$20,955	\$11,276	\$45,241	\$77,471	\$20,233	\$30,327	\$39,551	\$90,111	Sales
		Sales Forecast	\$31,382	\$16,887	\$67,752	\$116,021	\$30,301	\$45,417	\$59,232	\$134,950	
	Corporate	Sales	\$7,908	\$8,888	\$16,887	\$33,683	\$25,312	\$22,490	\$23,117	\$70,920	Sales Forecast
		Sales Forecast	\$11,844	\$13,310	\$25,290	\$50,444	\$37,908	\$33,681	\$34,620	\$106,209	
	Home Office	Sales	\$5,014	\$5,395	\$14,706	\$25,115	\$8,543	\$12,209	\$8,924	\$29,675	Sales Forecast
		Sales Forecast	\$7,509	\$8,080	\$22,024	\$37,613	\$12,794	\$18,284	\$13,364	\$44,442	
	Total	Sales	\$33,877	\$25,559	\$76,833	\$136,270	\$54,088	\$65,026	\$71,592	\$190,706	Sales Forecast
		Sales Forecast	\$50,734	\$38,277	\$115,066	\$204,078	\$81,002	\$97,383	\$107,216	\$285,601	
East	Consumer	Sales	\$21,822	\$25,224	\$61,922	\$108,967	\$16,685	\$67,002	\$52,874	\$136,561	Sales
		Sales Forecast	\$32,681	\$37,775	\$92,734	\$163,190	\$24,987	\$100,343	\$79,184	\$204,514	
	Corporate	Sales	\$10,622	\$16,694	\$27,848	\$55,165	\$20,799	\$42,436	\$26,966	\$90,202	Sales Forecast
		Sales Forecast	\$15,908	\$25,001	\$41,706	\$82,614	\$31,149	\$63,552	\$40,385	\$135,086	
	Home Office	Sales	\$3,842	\$4,930	\$18,744	\$27,516	\$25,349	\$28,058	\$21,433	\$74,840	Sales Forecast
		Sales Forecast	\$5,754	\$7,383	\$28,071	\$41,208	\$37,962	\$42,019	\$32,098	\$112,080	
	Total	Sales	\$36,287	\$46,847	\$108,514	\$191,648	\$62,833	\$137,496	\$101,273	\$301,603	Sales Forecast
		Sales Forecast	\$54,343	\$70,159	\$162,510	\$287,012	\$94,099	\$205,914	\$151,667	\$451,680	
South	Consumer	Sales	\$9,415	\$18,643	\$31,997	\$60,055	\$9,293	\$19,543	\$25,515	\$54,351	Sales
		Sales Forecast	\$14,100	\$27,919	\$47,919	\$89,938	\$13,917	\$29,267	\$38,212	\$81,396	
	Corporate	Sales	\$3,898	\$5,940	\$7,030	\$16,868	\$7,902	\$34,599	\$9,057	\$51,558	Sales Forecast
		Sales Forecast	\$5,838	\$8,896	\$10,528	\$25,262	\$11,835	\$51,815	\$13,563	\$77,213	
	Home Office	Sales	\$578	\$1,480	\$4,050	\$6,108	\$7,007	\$5,397	\$5,611	\$18,014	Sales Forecast
		Sales Forecast	\$865	\$2,216	\$6,065	\$9,147	\$10,493	\$8,083	\$8,403	\$26,978	
	Total	Sales	\$13,891	\$26,063	\$43,077	\$83,031	\$24,202	\$59,539	\$40,183	\$123,923	Sales Forecast
		Sales Forecast	\$20,803	\$39,032	\$64,512	\$124,347	\$36,244	\$89,165	\$60,178	\$185,587	
West	Consumer	Sales	\$31,341	\$29,916	\$46,034	\$107,292	\$20,670	\$54,087	\$60,140	\$134,896	Sales
		Sales Forecast	\$46,937	\$44,803	\$68,941	\$160,680	\$30,955	\$81,001	\$90,065	\$202,021	
	Corporate	Sales	\$24,491	\$26,046	\$23,351	\$73,888	\$30,853	\$20,111	\$34,371	\$85,335	Sales Forecast
		Sales Forecast	\$36,677	\$39,007	\$34,971	\$110,655	\$46,205	\$30,118	\$51,474	\$127,798	
	Home Office	Sales	\$9,115	\$7,390	\$11,074	\$27,579	\$14,481	\$16,407	\$22,659	\$53,548	Sales Forecast
		Sales Forecast	\$13,650	\$11,067	\$16,585	\$41,302	\$21,687	\$24,572	\$33,935	\$80,193	
	Total	Sales	\$64,947	\$63,352	\$80,460	\$208,759	\$66,003	\$90,605	\$117,170	\$273,779	Sales Forecast
		Sales Forecast	\$97,264	\$94,876	\$120,497	\$312,637	\$98,847	\$135,691	\$175,474	\$410,011	
Grand Total	Sales		\$149,002	\$161,822	\$308,884	\$619,707	\$207,126	\$352,666	\$330,218	\$890,010	Sales Forecast
	Sales Forecast		\$223,145	\$242,344	\$462,584	\$928,074	\$310,192	\$528,153	\$494,535	\$1,332,880	

Change the Growth Rate and Churn Rate to better understand their impact on sales forecasts

What if Forecast Based on All Sales (60% Growth, 6.40% Churn)

Region	Segment		Grand Total
Central	Consumer	Sales	\$253,962
		Sales Forecast	\$380,334
	Corporate	Sales	\$157,996
		Sales Forecast	\$236,615
	Home	Sales	\$91,213
	Office	Sales Forecast	\$136,600
	Total	Sales	\$503,171
		Sales Forecast	\$753,548
East	Consumer	Sales	\$357,142
		Sales Forecast	\$534,856
	Corporate	Sales	\$203,577
		Sales Forecast	\$304,876
	Home	Sales	\$131,110
	Office	Sales Forecast	\$196,350
	Total	Sales	\$691,828
		Sales Forecast	\$1,036,082
South	Consumer	Sales	\$195,581
		Sales Forecast	\$292,902
	Corporate	Sales	\$121,886
		Sales Forecast	\$182,536
	Home	Sales	\$74,255
	Office	Sales Forecast	\$111,204
	Total	Sales	\$391,722
		Sales Forecast	\$586,643
West	Consumer	Sales	\$363,975
		Sales Forecast	\$545,089
	Corporate	Sales	\$232,348
		Sales Forecast	\$347,964
	Home	Sales	\$143,491
	Office	Sales Forecast	\$214,892
	Total	Sales	\$739,814
		Sales Forecast	\$1,107,945
Grand Total		Sales	\$2,326,534
		Sales Forecast	\$3,484,218

Measure Names

- Sales
- Sales Forecast

Change the Growth Rate and Churn Rate to better understand their impact on sales forecasts