



Communicating with Charts

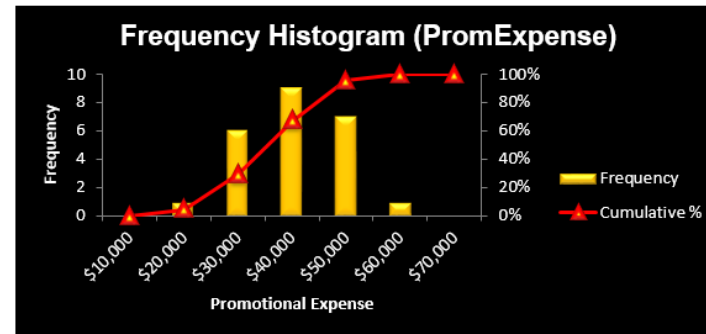
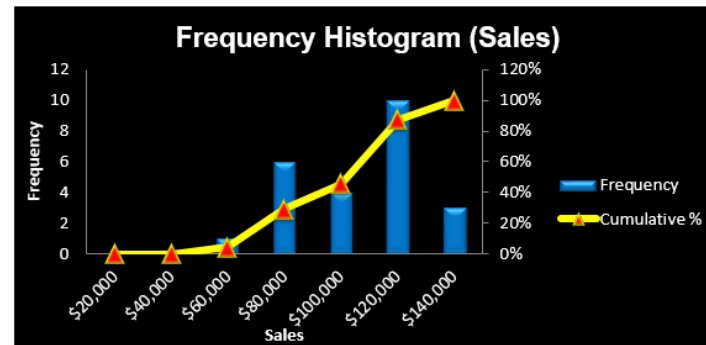
“A PICTURE IS WORTH A THOUSAND WORDS”

Histograms (Many elements) & Line Diagrams (Trends)

JC: Bin is used for Histogram Analysis

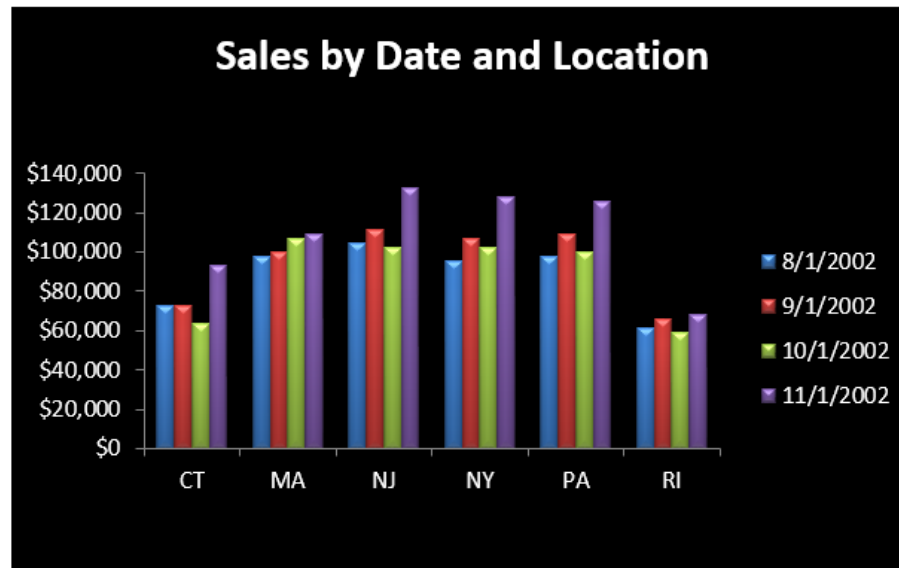
SALES			
Bin	Bin	Frequency	Cumulative %
\$20,000	\$20,000	0	0.00%
\$40,000	\$40,000	0	0.00%
\$60,000	\$60,000	1	4.17%
\$80,000	\$80,000	6	29.17%
\$100,000	\$100,000	4	45.83%
\$120,000	\$120,000	10	87.50%
\$140,000	\$140,000	3	100.00%

PROMEXPENSE			
Bin	Bin	Frequency	Cumulative %
\$10,000	\$10,000	0	0.00%
\$20,000	\$20,000	1	4.17%
\$30,000	\$30,000	6	29.17%
\$40,000	\$40,000	9	66.67%
\$50,000	\$50,000	7	95.83%
\$60,000	\$60,000	1	100.00%
\$70,000	\$70,000	0	100.00%



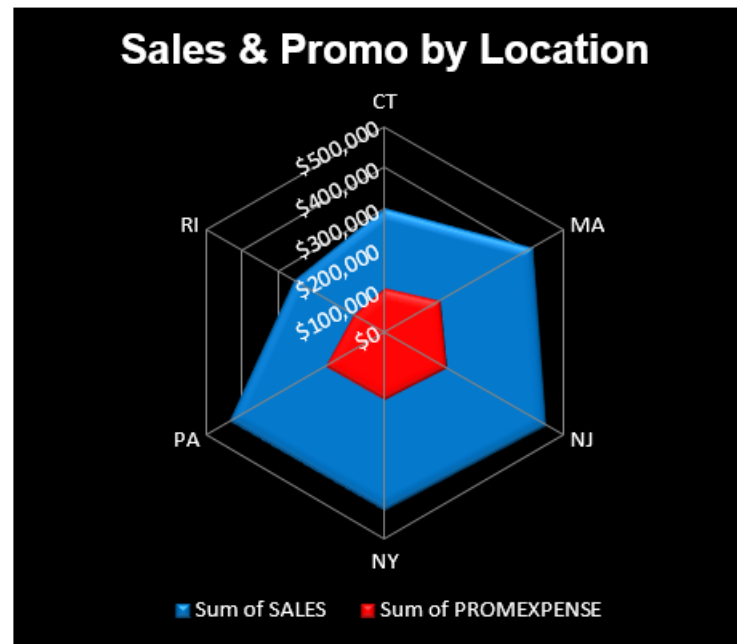
Histogram – Comparative

Sum of SALES	Dates				
Location	8/1/2002	9/1/2002	10/1/2002	11/1/2002	Grand Total
CT	\$72,509	\$72,510	\$63,362	\$93,273	\$301,654
MA	\$97,800	\$100,182	\$107,031	\$109,342	\$414,355
NJ	\$104,788	\$111,601	\$102,472	\$132,300	\$451,161
NY	\$95,511	\$107,042	\$102,421	\$127,739	\$432,713
PA	\$97,884	\$109,300	\$100,109	\$125,477	\$432,770
RI	\$61,006	\$65,602	\$58,789	\$67,900	\$253,297
Grand Total	\$529,498	\$566,237	\$534,184	\$656,031	\$2,285,950



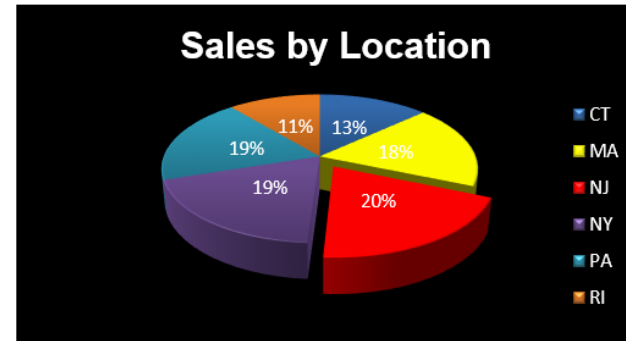
Radar – Multi-parameter

Location	Sum of SALES	Sum of PROMEXPENSE
CT	\$301,654	\$106,546
MA	\$414,355	\$155,194
NJ	\$451,161	\$172,031
NY	\$432,713	\$162,852
PA	\$432,770	\$163,469
RI	\$253,297	\$85,360
Grand Total	\$2,285,950	\$845,452

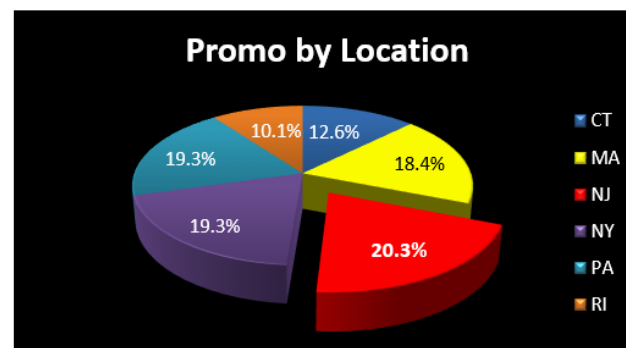


Pie Chart – Few dimensions

Sales by Location	
Location	Sum of SALES
CT	\$301,654
MA	\$414,355
NJ	\$451,161
NY	\$432,713
PA	\$432,770
RI	\$253,297
Grand Total	\$2,285,950

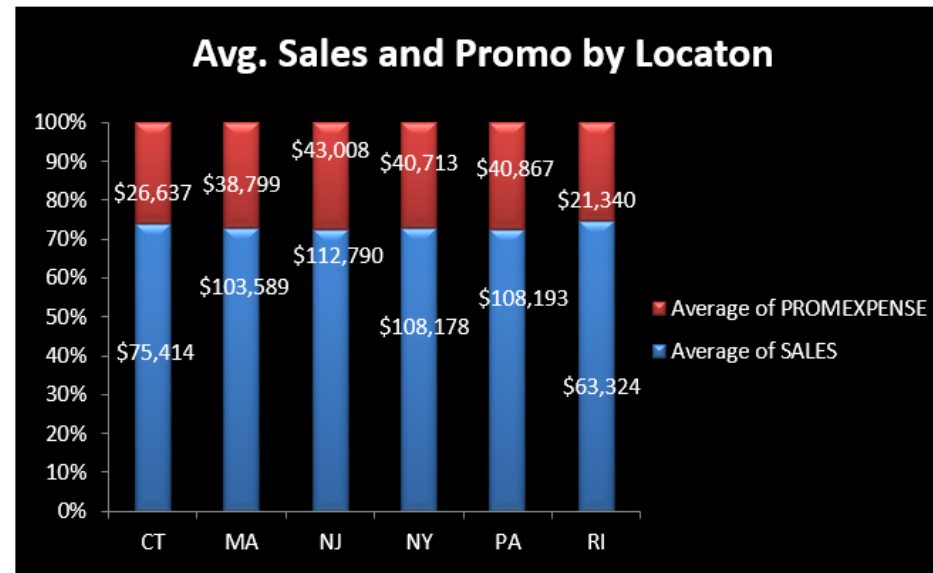


Promo Expense by Location	
Location	Sum of PROMEXPENSE
CT	\$106,546
MA	\$155,194
NJ	\$172,031
NY	\$162,852
PA	\$163,469
RI	\$85,360
Grand Total	\$845,452



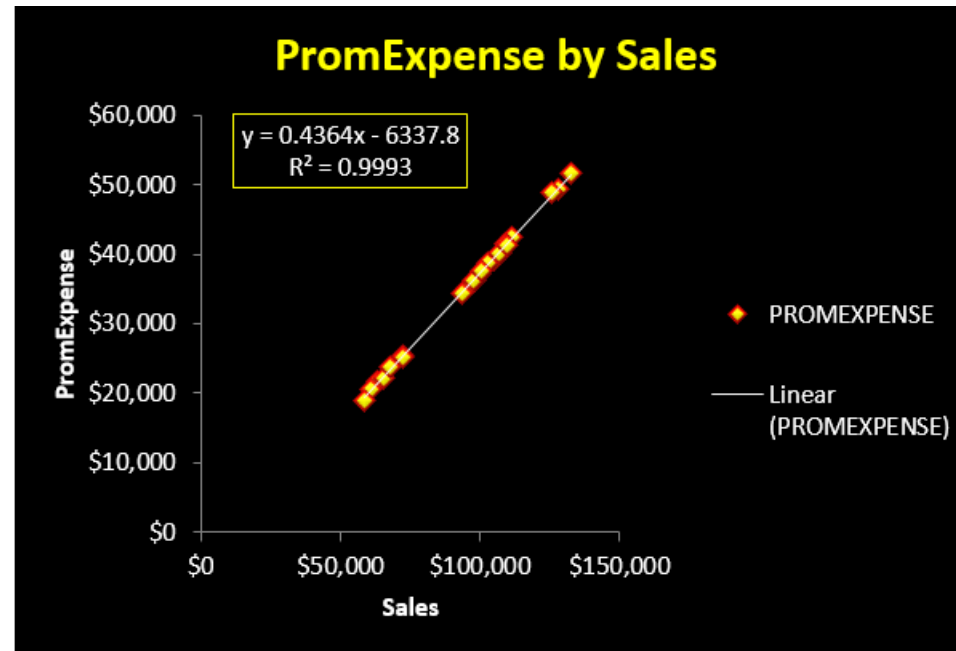
Stacked – Percent of Total Visual

Row Label	Average of SALES	Average of PROMEXPENSE	PromoExpense Ratio Per Sale
CT	\$75,414	\$26,637	0.35
MA	\$103,589	\$38,799	0.37
NJ	\$112,790	\$43,008	0.38
NY	\$108,178	\$40,713	0.38
PA	\$108,193	\$40,867	0.38
RI	\$63,324	\$21,340	0.34
Grand Total	\$95,248	\$35,227	100%



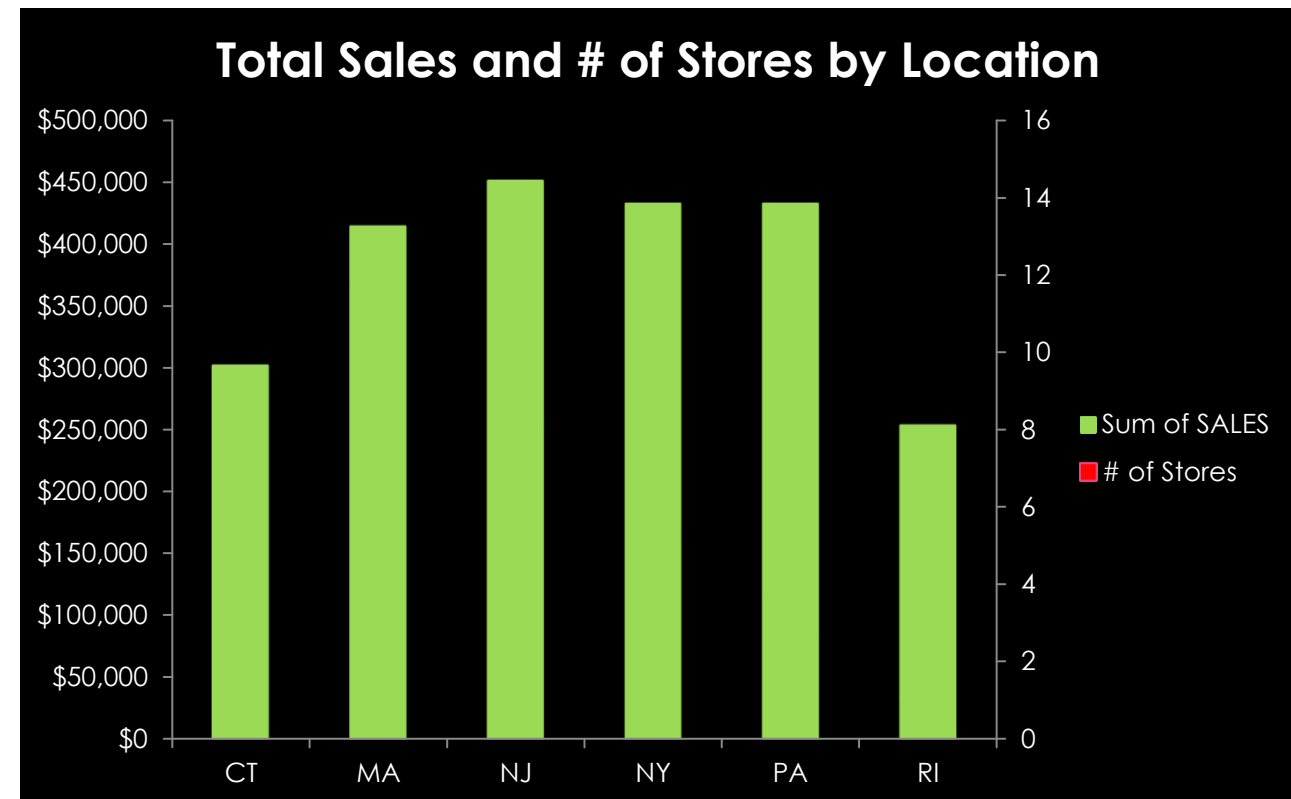
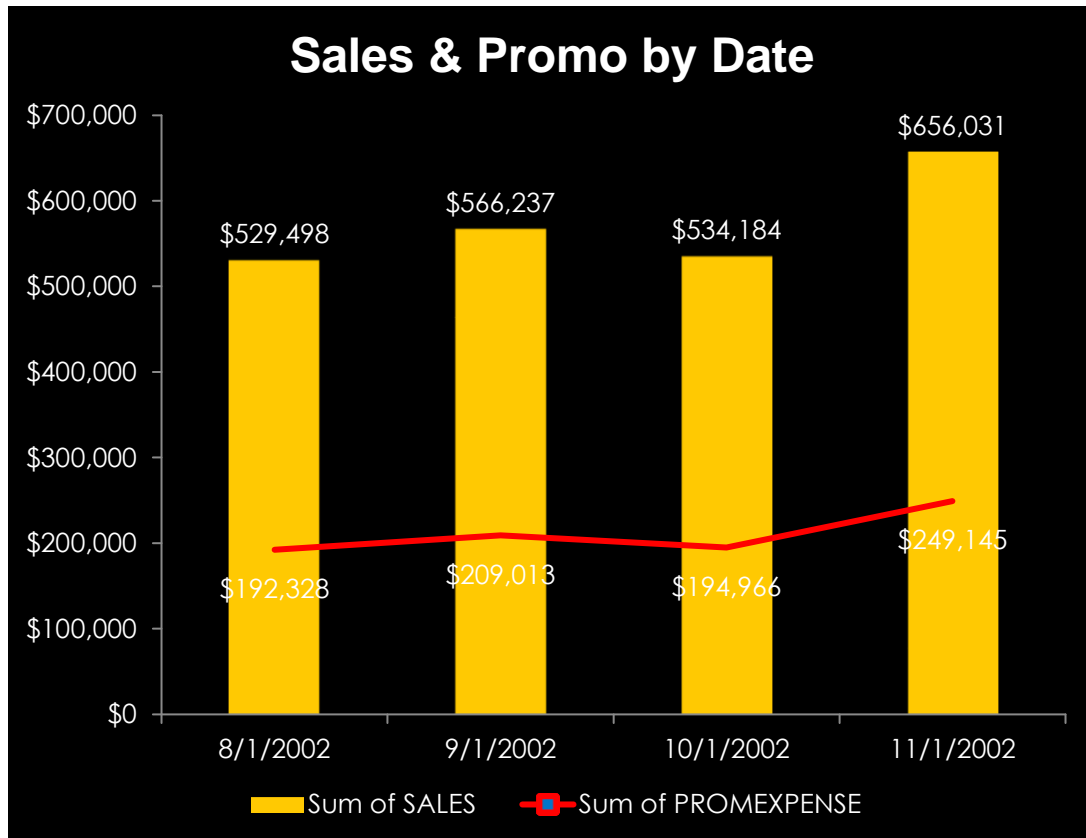
Line Diagram – Relationships

Regression Statistics	
Multiple R	0.9996591
R Square	0.999318316
Adjusted R Square	0.99928733
Standard Error	251.6301734
Observations	24



	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-6337.835647	237.0803886	-26.73285498	2.87494E-18	-6829.51028	-5846.161014	-6829.51028	-5846.161014
SALES	0.436387522	0.002429969	179.5856211	2.48513E-36	0.431348074	0.441426969	0.431348074	0.441426969

Multi-Chart (Overlays)



Charting is more intuitive

Customer	Age	Gender	Own Home	Married	Close	Salary	Children	PrevCust	PrevSpent	Catalogs	AmountSpent
1	73	Female	Rent	Single	Yes	\$16,400	1	Yes	\$246	12	\$218
2	22	Female	Own	Married	No	\$108,100	3	Yes	\$1,622	18	\$2,632
3	51	Male	Own	Married	Yes	\$97,300	1	No	\$0	12	\$3,048
4	48	Male	Own	Married	Yes	\$26,800	0	Yes	\$536	12	\$435
5	57	Male	Rent	Single	Yes	\$11,200	0	No	\$0	6	\$106
6	29	Female	Rent	Single	Yes	\$42,800	0	Yes	\$856	12	\$759
7	33	Female	Rent	Single	Yes	\$34,700	0	No	\$0	18	\$1,615
8	55	Female	Own	Married	No	\$80,000	0	Yes	\$2,400	6	\$1,985
						\$60,300	0	No	\$0	24	\$2,091
						\$62,300	0	Yes	\$1,869	24	\$2,644
						\$94,200	1	Yes	\$1,413	18	\$1,211
						\$73,800	0	Yes	\$2,214	24	\$3,120
						\$45,900	2	Yes	\$459	12	\$416
						\$52,600	1	No	\$0	18	\$1,773
						\$82,200	1	No	\$0	12	\$1,517
						\$76,700	2	Yes	\$767	6	\$534
						\$79,400	3	Yes	\$397	6	\$200
						\$66,900	0	Yes	\$1,338	12	\$1,220
						\$12,400	1	No	\$0	12	\$229
						\$52,600	1	Yes	\$789	12	\$1,052
						\$28,300	0	Yes	\$849	24	\$933
						\$53,900	0	No	\$0	12	\$1,186
						\$28,900	0	Yes	\$578	12	\$830
						\$15,900	0	No	\$0	18	\$406
						\$50,700	3	Yes	\$254	6	\$157
						\$17,800	1	No	\$0	18	\$589
						\$51,300	0	Yes	\$1,026	24	\$1,424
						\$74,400	0	Yes	\$1,488	18	\$2,479
29	76	Female	Own	Married	Yes	\$88,200	0	No	\$0	24	\$2,749
30	38	Male	Own	Married	No	\$79,000	1	Yes	\$1,975	18	\$2,779

