Introduction: The objective of this project is budgeting analysis, Inventory Management, Monthly sales Analysis, Sensitivity analysis!

Budgeting Analysis: The financial journey through budgeting! The distribution of budget allocations across departments is considered monthly. The dynamic interplay of gross sales trends and profit margins is explored. This juxtaposition reveals the story behind the numbers, and "It provides insights that light the way for Informed decision-making."

Main Measures:

```
Cost Variance = [Qty Bud]*([Unit Cost BDG]-[Unit Net cost])
Discount Variance = [Qty Bud]*([Unit Disocunt BDG]-[Unit Discount])
Price Variance= [Qty Bud]* ([Unit NET price BDG]-[Unit Net Price])
Actual vs. Budgeted Margin % = DIVIDE(([Margin]-[Margin Bud]) - [Margin Bud],[Margin Bud],1)
```
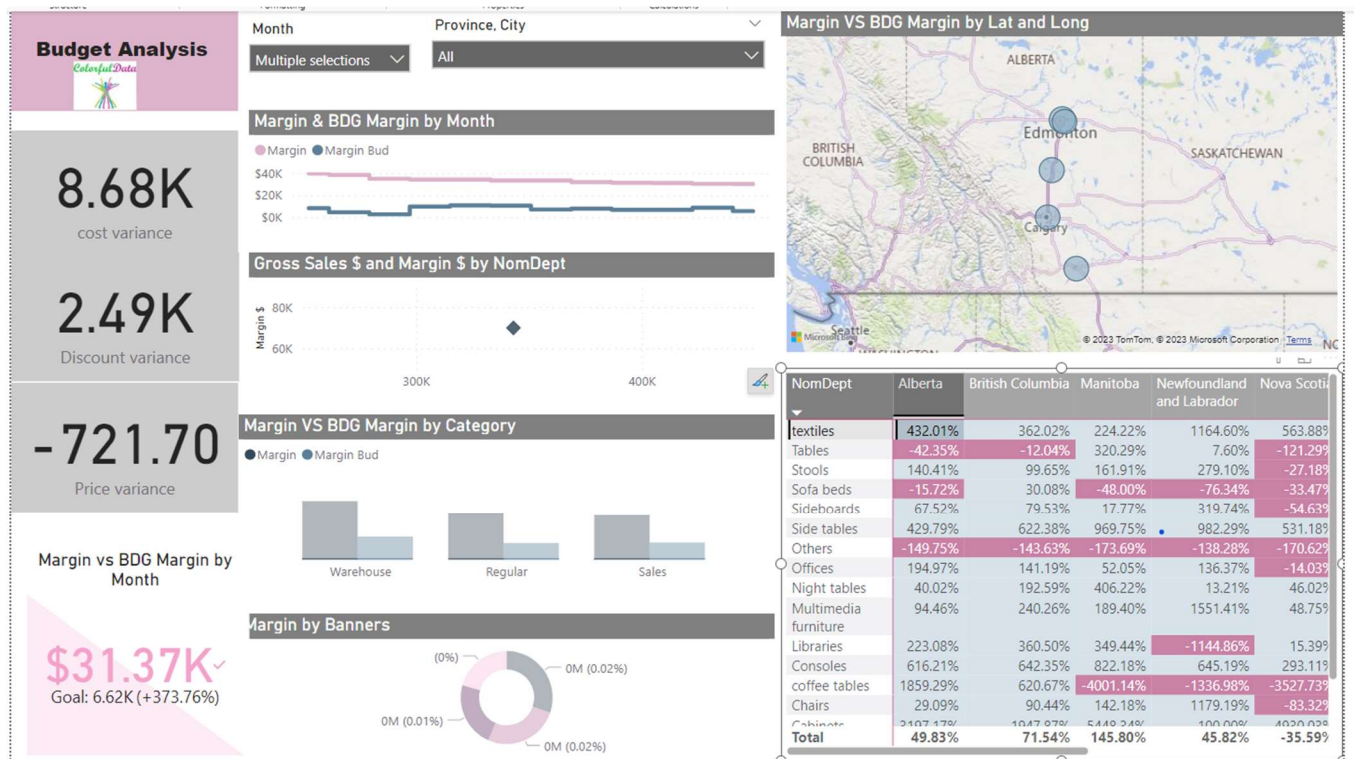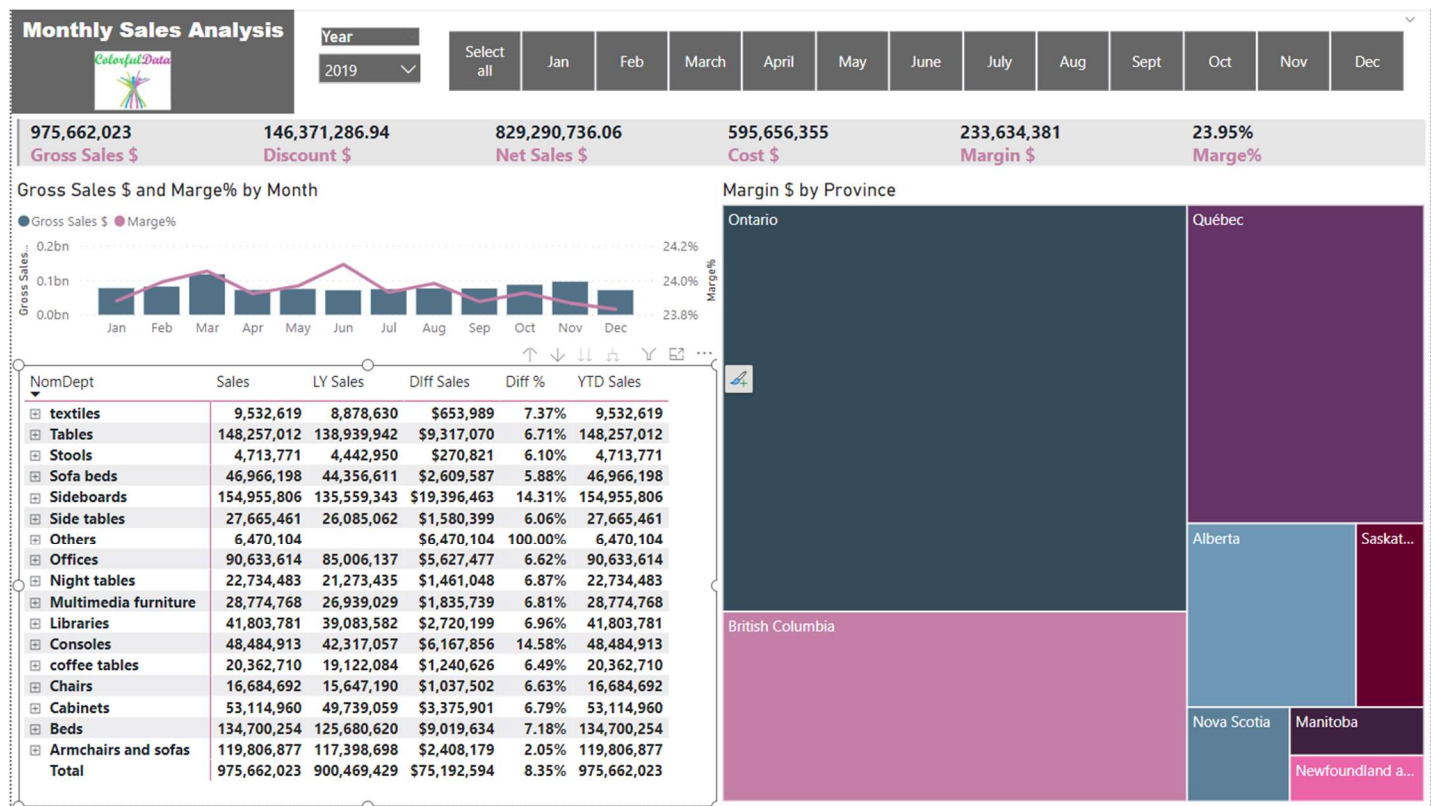

2- **Monthly Sales Analysis:**
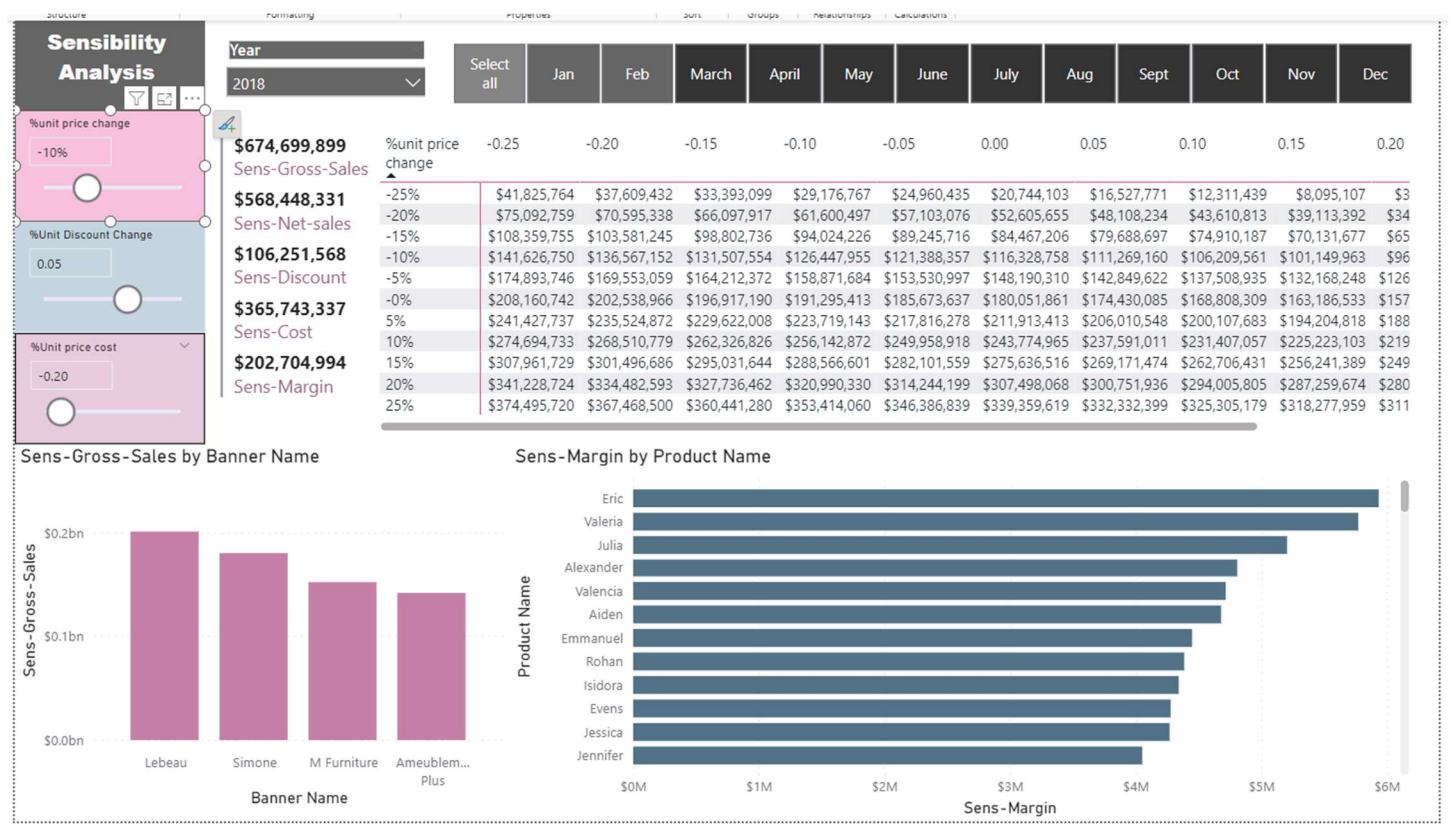A monthly sales report is used to monitor, evaluate, analyze, and determine sales trends monthly.

Measures:

```
YTD Gross Sales = Calculate( [Gross Sales $],DATESYTD(DimDate[Date]))
Diff % GS vs LY GS = DIVIDE([Diff Gross Sales vs LY Gross Sales],[LY Gross Sales],1)
Diff Gross Sales vs LY Gross Sales = [Gross Sales]-[LY Gross Sales]
```

Monthly Sales Analysis

Year 2019

| Select all | Jan | Feb | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |

975,662,023	146,371,286.94	829,290,736.06	595,656,355	233,634,381	23.95%
Gross Sales $	Discount $	Net Sales $	Cost $	Margin $	Marge%

Gross Sales $ and Marge% by Month

● Gross Sales $ ● Marge%

Margin $ by Province

NomDept	Sales	LY Sales	DIff Sales	Diff %	YTD Sales
⊞ textiles	9,532,619	8,878,630	$653,989	7.37%	9,532,619
⊞ Tables	148,257,012	138,939,942	$9,317,070	6.71%	148,257,012
⊞ Stools	4,713,771	4,442,950	$270,821	6.10%	4,713,771
⊞ Sofa beds	46,966,198	44,356,611	$2,609,587	5.88%	46,966,198
⊞ Sideboards	154,955,806	135,559,343	$19,396,463	14.31%	154,955,806
⊞ Side tables	27,665,461	26,085,062	$1,580,399	6.06%	27,665,461
⊞ Others	6,470,104		$6,470,104	100.00%	6,470,104
⊞ Offices	90,633,614	85,006,137	$5,627,477	6.62%	90,633,614
⊞ Night tables	22,734,483	21,273,435	$1,461,048	6.87%	22,734,483
⊞ Multimedia furniture	28,774,768	26,939,029	$1,835,739	6.81%	28,774,768
⊞ Libraries	41,803,781	39,083,582	$2,720,199	6.96%	41,803,781
⊞ Consoles	48,484,913	42,317,057	$6,167,856	14.58%	48,484,913
⊞ coffee tables	20,362,710	19,122,084	$1,240,626	6.49%	20,362,710
⊞ Chairs	16,684,692	15,647,190	$1,037,502	6.63%	16,684,692
⊞ Cabinets	53,114,960	49,739,059	$3,375,901	6.79%	53,114,960
⊞ Beds	134,700,254	125,680,620	$9,019,634	7.18%	134,700,254
⊞ Armchairs and sofas	119,806,877	117,398,698	$2,408,179	2.05%	119,806,877
Total	975,662,023	900,469,429	$75,192,594	8.35%	975,662,023

3- Sensitivity Analysis, "What-If" analysis

Sensitivity analysis is used in decision-making and risk assessment to understand how changes in variables like price can impact the outcome of other measures in sales. Sensitivity analysis is particularly useful when dealing with financial projections, or any situation where uncertainties exist.

Sensibility Analysis

%unit price change: -10%
%Unit Discount Change: 0.05
%Unit price cost: -0.20

Year: 2018

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

$674,699,899 Sens-Gross-Sales
$568,448,331 Sens-Net-sales
$106,251,568 Sens-Discount
$365,743,337 Sens-Cost
$202,704,994 Sens-Margin

%unit price change	-0.25	-0.20	-0.15	-0.10	-0.05	0.00	0.05	0.10	0.15	0.20
-25%	$41,825,764	$37,609,432	$33,393,099	$29,176,767	$24,960,435	$20,744,103	$16,527,771	$12,311,439	$8,095,107	$3
-20%	$75,092,759	$70,595,338	$66,097,917	$61,600,497	$57,103,076	$52,605,655	$48,108,234	$43,610,813	$39,113,392	$34
-15%	$108,359,755	$103,581,245	$98,802,736	$94,024,226	$89,245,716	$84,467,206	$79,688,697	$74,910,187	$70,131,677	$65
-10%	$141,626,750	$136,567,152	$131,507,554	$126,447,955	$121,388,357	$116,328,758	$111,269,160	$106,209,561	$101,149,963	$96
-5%	$174,893,746	$169,553,059	$164,212,372	$158,871,684	$153,530,997	$148,190,310	$142,849,622	$137,508,935	$132,168,248	$126
-0%	$208,160,742	$202,538,966	$196,917,190	$191,295,413	$185,673,637	$180,051,861	$174,430,085	$168,808,309	$163,186,533	$157
5%	$241,427,737	$235,524,872	$229,622,008	$223,719,143	$217,816,278	$211,913,413	$206,010,548	$200,107,683	$194,204,818	$188
10%	$274,694,733	$268,510,779	$262,326,826	$256,142,872	$249,958,918	$243,774,965	$237,591,011	$231,407,057	$225,223,103	$219
15%	$307,961,729	$301,496,686	$295,031,644	$288,566,601	$282,101,559	$275,636,516	$269,171,474	$262,706,431	$256,241,389	$249
20%	$341,228,724	$334,482,593	$327,736,462	$320,990,330	$314,244,199	$307,498,068	$300,751,936	$294,005,805	$287,259,674	$280
25%	$374,495,720	$367,468,500	$360,441,280	$353,414,060	$346,386,839	$339,359,619	$332,332,399	$325,305,179	$318,277,959	$311

Sens-Gross-Sales by Banner Name

(Banner Name: Lebeau, Simone, M Furniture, Ameublem... Plus)

Sens-Margin by Product Name

(Product Name: Eric, Valeria, Julia, Alexander, Valencia, Aiden, Emmanuel, Rohan, Isidora, Evens, Jessica, Jennifer; Sens-Margin axis $0M–$6M)

4- **Inventory Analysis.** Manage inventory items and control the day-to-day inventory operations while implementing an agreed-upon inventory control protocol.

```
Current Inventory = if
(    Inventaires[SalesLastMonth]-Inventaires[Inventory]>0,Inventaires[SalesLastMonth]-
Inventaires[Inventory],0)

RequiredInventory$ = SUM(Inventaires[Current Inventory])
TargetLevel = Inventaires[Inventory$]+[RequiredInventory$]
```

Inventory Analysis

Colorful Data

92.23%
InventoryRatio

Current Inventory
227.48M

Required Inventory
19.16M

Target
246.64M

Tuesday, December 31, 2019

City	Armchairs and sofas	Beds	Cabinets	Chairs	coffee tables	Consoles	Libraries	Multimedia furniture	Night tables	Offices	Others	Side tables	Sideboard
Abbotsford	109,882.42	0.00	0.00	0.00	0.00	59,916.88	0.00	0.00	0.00	0.00		0.00	
Ajax	153,120.35	0.00	0.00	0.00	0.00	53,407.41	0.00	0.00	0.00	12,708.57		0.00	
Barrie	127,373.11	0.00	0.00	0.00	0.00	25,173.63	0.00	0.00	0.00	0.00		0.00	
Brampton	174,946.72	55,685.17	0.00	0.00	4,293.96	54,456.87	31,594.65	0.00	0.00	46,199.89		0.00	55,15
Brantford	144,253.58	0.00	0.00	0.00	0.00	41,120.79	0.00	0.00	0.00	53,864.32	27,771.00	0.00	13,09
Burlington	101,514.06	81,412.95	0.00	0.00	0.00	64,379.04	26,151.03	29,664.37	0.00	77,456.32		0.00	55,17.
Burnaby	116,901.86	0.00	0.00	0.00	0.00	50,061.58	0.00	0.00	0.00	54,843.50	7,060.69	0.00	42,36
Calgary	138,420.14	0.00	0.00	0.00	0.00	28,497.59	16,407.33	0.00	0.00	10,492.99		0.00	8,13.
Cambridge	140,538.93	4,202.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	
Cape Breton	130,490.68	0.00	0.00	0.00	0.00	47,624.53	980.85	0.00	0.00	65,054.99		0.00	
Chatham-Kent	140,221.85	0.00	10,766.97	0.00	14,602.87	69,636.18	55,957.84	18,222.97	0.00	138,536.59		0.00	98,27.
Clarington	103,806.03	0.00	0.00	0.00	0.00	43,634.65	4,270.22	0.00	0.00	51,129.94		0.00	
Coquitlam	115,720.56	0.00	0.00	0.00	0.00	33,932.55	0.00	0.00	0.00	0.00	9,636.00	0.00	
Delta	101,351.35	0.00							14,696.52			9,599.92	
Total	8,428,985.40	989,062.63	64,920.40	9,808.82	99,061.82	3,097,213.86	947,948.77	125,691.63	51,041.15	2,417,562.16	96,307.58	76,605.34	1,522,952