Management Accounting

PRACTICAL CLASS 19

Illustration by Ana Seixas

Variance Analysis

BUDGET RECONCILIATION AND VARIANCE ANALYSIS

Variance Analysis

PLANS... FAIL

Even with all the knowledge in the world, it is still impossible to accurately predict the future and the budgets will deviate from the reality

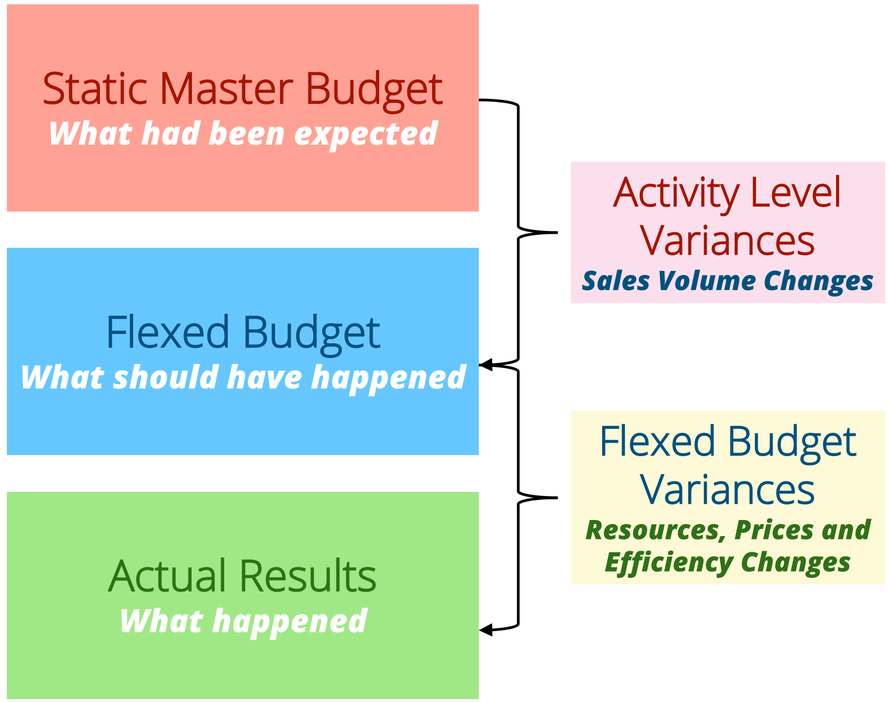
Afterwards, we must understand where did our plan/budget deviated from the reality. The Why Matters!

There are 3 things that explain variance:

Sales Volume	We sold more/less quantities than expected
Prices	We charged/ were charged higher/lower prices than budgeted
Efficiency	We needed more/less volume of inputs to attain the same output

The Framework

HERE'S HOW WE ADDRESS THE ISSUE



Steps to Variance Reconciliation

1) Flex the Budget
2) Calculate all Variances
    - Sales Margin Volume Variance
    - Sales Price Variance
    - Variable Costs Variance
    - Fixed Costs Variance
3) Analyse the Variances
4) Reconcile Budget and Actual Profit
5) Investigate Significant Variances
6) Implement Corrective Actions

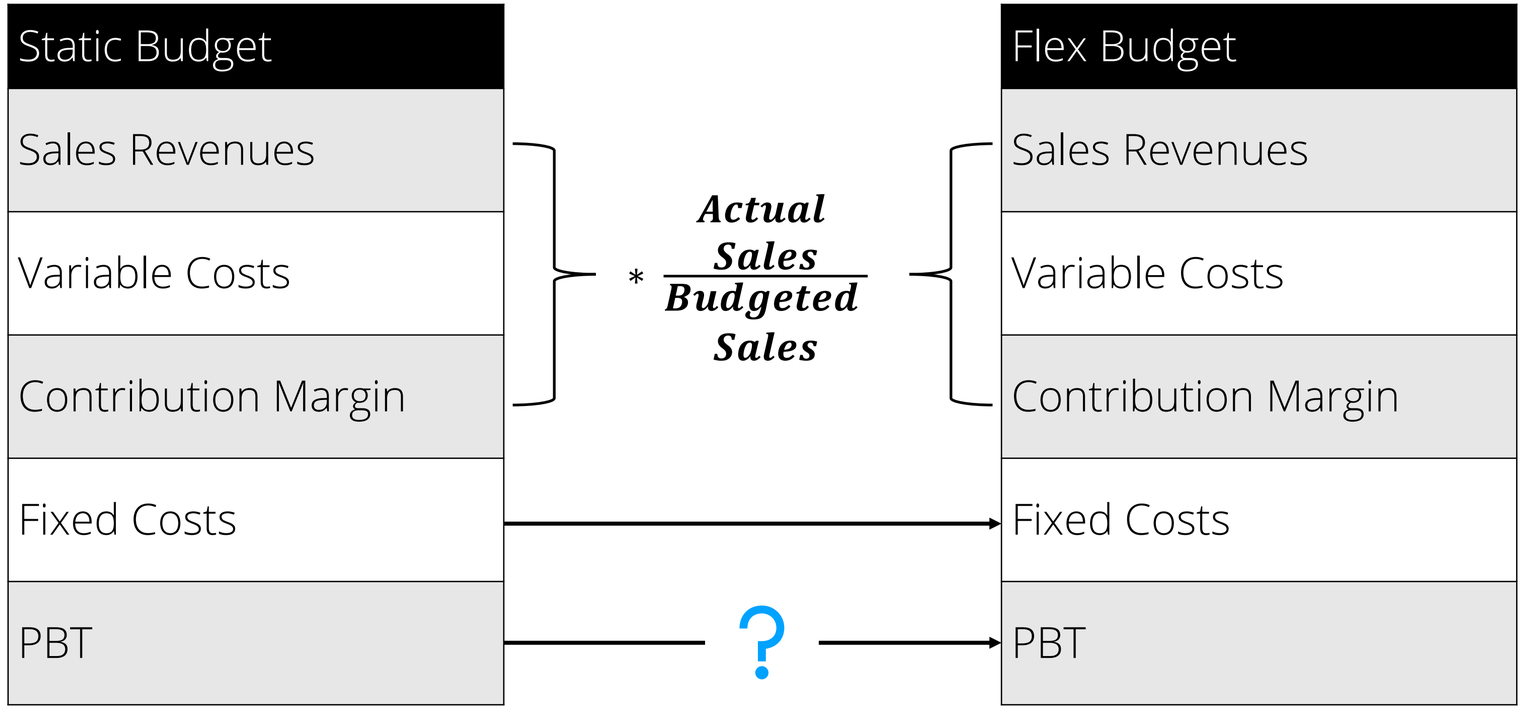
The Flex Budget

LET'S START WITH THE FORMULAS

Adjust all the lines that depend on the Quantity Sold!

Do not change Fixed Costs!

Bonus: Can you produce an expression that gives you the change in profit between static budget and flex?



The Variances

IN REALITY, IT IS JUST 4 FORMULAS ☺

Sales Margin Volume Variance	$(Sales\ Volume_{Actual} - Sales\ Volume_{Static}) * CM\ Unit_{Budget}$
Sales Price Variance	$(Sales\ Price_{Actual} - Sales\ Price_{Budget}) * Sales\ Volume_{Actual}$
Cost Price Variance	$(Price_{Budget} - Price_{Actual}) * Volume_{Actual}$
Cost Usage Variance	$(Volume_{Flex} - Volume_{Actual}) * Price_{Budget}$

The Variances

BUCKLE UP, SOME FORMULAS 1/3 ☺

Sales Margin Volume Variance	$(Sales\ Volume_{Actual} - Sales\ Volume_{Static}) * CM\ Unit_{Budget}$
Sales Price Variance	$(Sales\ Price_{Actual} - Sales\ Price_{Budget}) * Sales\ Volume_{Actual}$
Materials Price Variance	$(Materials\ Price_{Budget} - Materials\ Price_{Actual}) * Materials\ Volume_{Actual}$
Materials Usage Variance	$(Materials\ Volume_{Flex} - Materials\ Volume_{Actual}) * Materials\ Price_{Budget}$

The Variances

BUCKLE UP, SOME FORMULAS 2/3 ☺

Wage Rate Variance	$(Wage\ Rate_{Budget} - Wage\ Rate_{Actual}) * Labour\ Hours_{Actual}$
Labour Efficiency Variance	$(Labout\ Hours_{Flex} - Labour\ Hours_{Actual}) * Wage\ Rate_{Budget}$
Fixed Overheads Variance	$(Fixed\ Overheads_{Budget} - Fixed\ Overheads_{Actual})$
Variable Overheads Expenditure Variance	$(Price_{Budget} - Price_{Actual}) * Volume_{Actual}$

The Variances

BUCKLE UP, SOME FORMULAS 3/3 ☺

Variable Overheads Efficiency Variance	$(Volume_{Flex} - Volume_{Actual}) * Price_{Budget}$

For Multiple Products

Sales Margin Volume Variance	$(Sales\ Volume^{X}_{Actual} - Sales\ Volume^{X}_{Static}) * CM\ Unit^{X}_{Budget}$, for product X
Sales Mix Variance	$(Mix\ \%^{X}_{Actual} - Mix\ \%^{X}_{Budget}) * Total\ SalesVolume_{Actual} * CM\ Unit^{X}_{Budget}$, for product X
Sales Quantity Variance	$(Total\ Sales_{Actual} - Total\ Sales_{Budget}) * Mix\ \%^{X}_{Budget} * CM\ Unit^{X}_{Budget}$, for product X

Reconciling the Budget

THE END GAME

Formulas are constructed in such a way that positive variances are **favourable** to the firm (i.e. more profit) and **negative** variances are **unfavourable** to the firm

Hence, joining all the variances we can get from the budgeted profit to the actual profit, with a clear understanding of the changes!

Static Budget Profit	
+ SMVV	Changes in Sales Volume
Flex Budget Profit	
+ All Price Variances	Changes in Unit Prices/Costs
+ All Volume Variances	Changes in Efficiency
Actual Profit	

Exercise 64

TÁXIS PÉLIGEIRO

Exercise 67

THE HAPPY COMPANY

Exercise 68

FAST & SAFE TRANSPORT