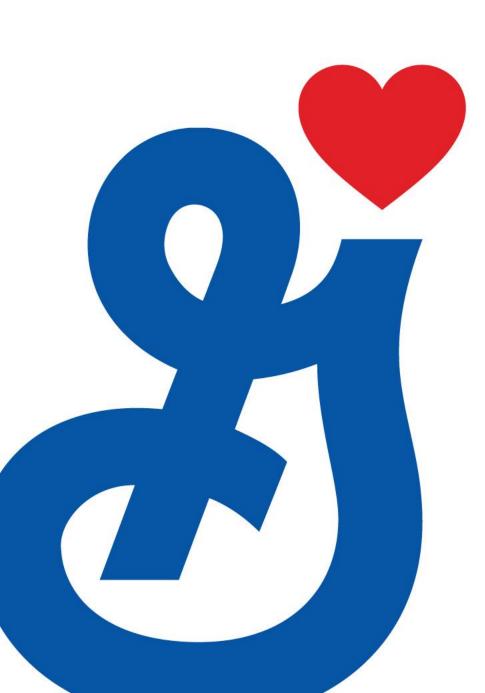
Ice Breaker!



What was the last country you visited outside of the country you currently live? Feel free to put answers in the chat!



Supply Chain AOC Training

Global FP&A Capabilities Team

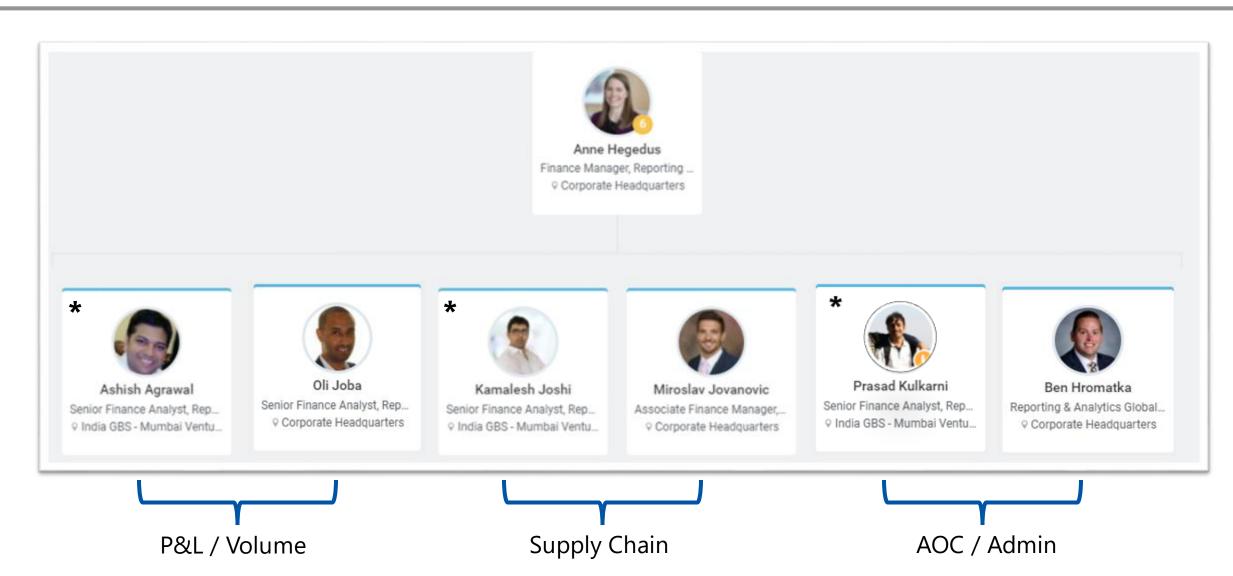
Agenda



1	Meet the Team
2	AOC Basics
3	AOC Calculation Examples
4	Overview of AOC Missing Rate / Override Form
5	Rate Override Example
6	AOC DASHB Query

Meet The Team!





★ GIC Team Members (Available until 11:00AM CST)

Thank You!



- Big thank you to those who participated!!
- We read through all 13 responses on the survey sent out
- Your feedback helped drive the content for the training

What is an AOC?



What is an AOC?

- Stand for **A**nalysis **o**f **C**hange
- Financial variance between two different scenarios (ex. Prior Forecast vs Current Forecast)
- Starts to uncover the reasons behind a variance
- Can be analyzed on any line of the P&L

	Old	New	Change	% Change
Volume (pounds)	11	12	1	9%
Manufacturing - Total	\$33	\$39	\$6	18%

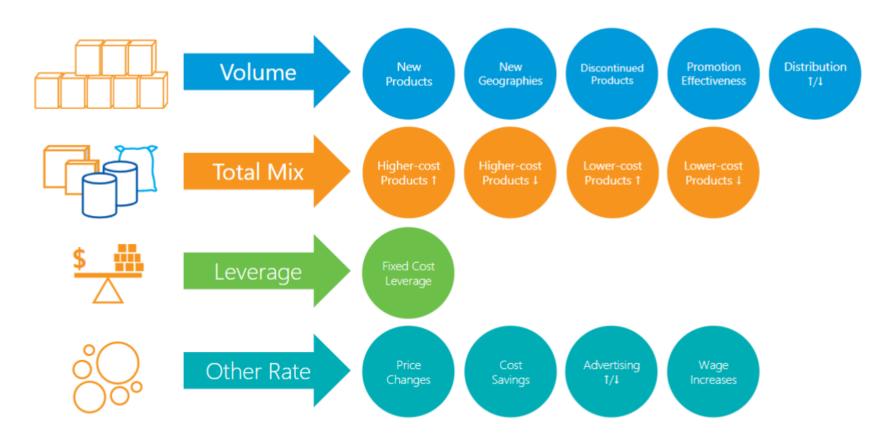
It answers "Why" a financial variance occurred



Variance Drivers



• The AOC simplifies the process and groups the variance drivers into 4 categories



AOC Simplified

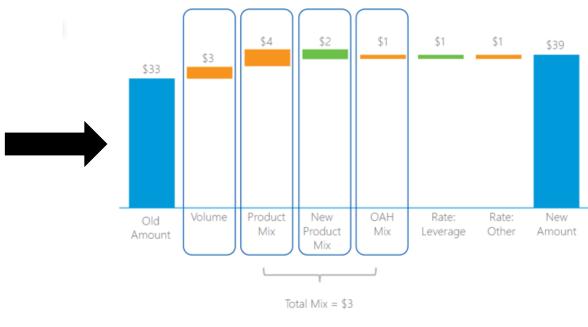


AOCs Allow Us to Go From This...

	Old	New	Change	% Change
Volume (pounds)	11	12	1	9%
Manufacturing - Total	\$33	\$39	\$6	18%



...to This

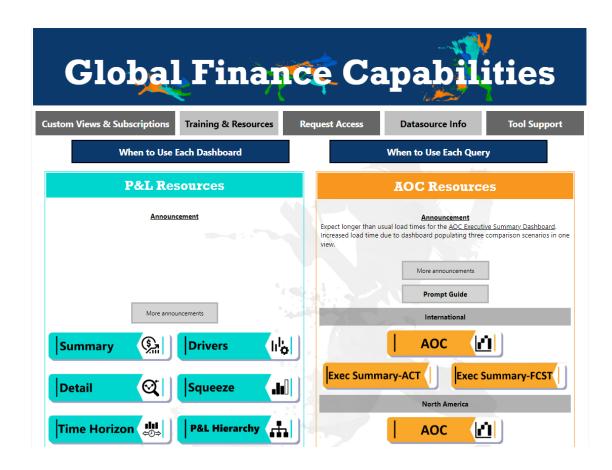


Positive impact
Negative impact

AOC Dashboard



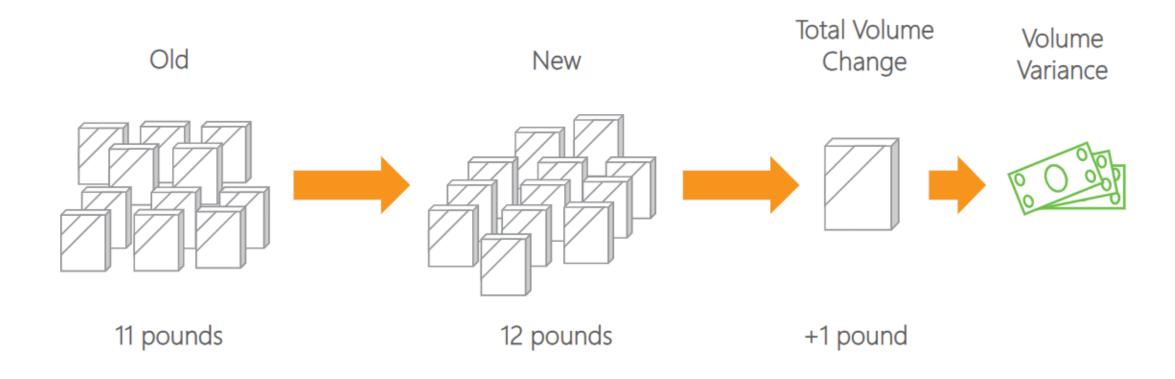
- Go/financedash
- Refreshes every 6 hours (12am, 6am, 12pm, 6pm)
- This Global AOC dashboard is the source of truth!



Volume Variance



Volume variance in the AOC explains how much a P&L line changed as a result of a change in **total delivery volume** and holds all else constant (mix of products, rate, and leverage). P&L impact from product-level volume changes are calculated in mix variance, which is covered in the next section.



Volume Formula





The volume variance formula is designed to assess the impact to the P&L from volume changes, assuming mix, leverage, and other rate are constant.

Change in Total Volume: By using total volume change, the calculation doesn't take into consideration the changes to the mix of product...just the total quantity change. Variance from product-level volume changes are quantified in mix variance.

Old Average Total Rate:

- Old refers to the "old scenario." By using the old scenario, any mix and rate changes in the new scenario are not incorporated ... they are held constant.
- Average rate means the P&L line divided by Total Volume. This rate reflects the weighted-average of the products in the P&L line.
- Total Rate (fixed + variable): This formula uses the total rate. Variable rates are included because they are directly tied to changes in volume. Fixed rates are included to hold leverage levels constant (more explanation of leverage in the leverage variance section).

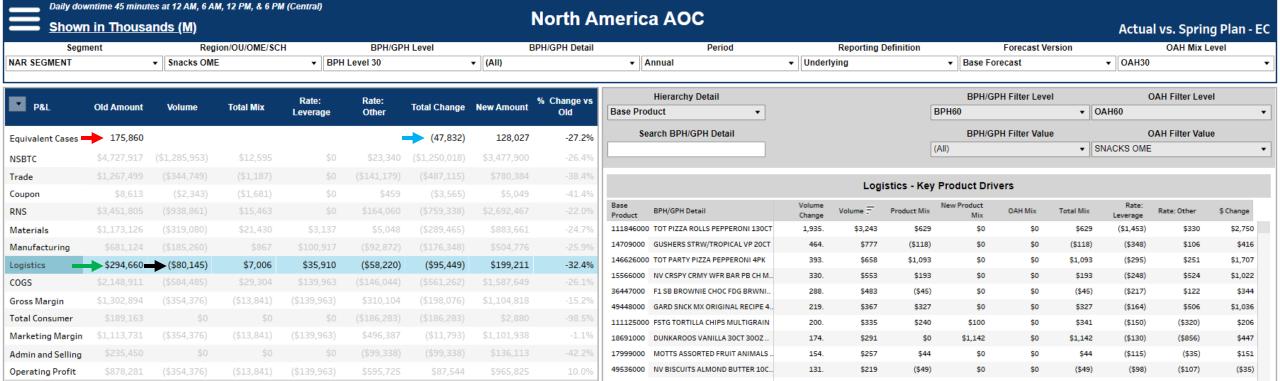
Volume Calculation





Snacks Vol Contribution

- **Change in Volume:** (47,832)
- Old Logistics Spend: \$294,660
- → Old Logistics Volume: 175,860
 - **Old Average Total Rate: \$1.68**
- **→ Snack Vol Contribution:** \$80,145

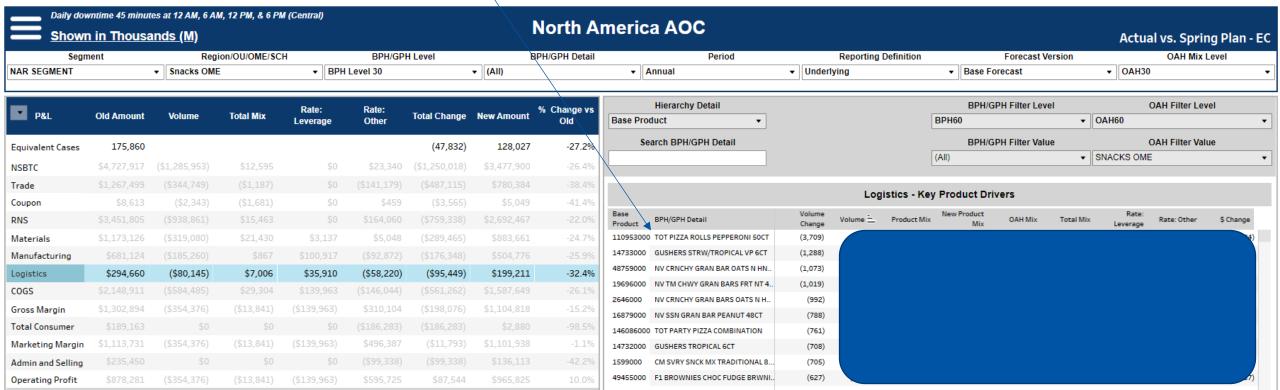


Volume Calculation - Practice



What is the volume contribution for base product 110953000 – Tot Pizza Rolls Pepperoni 50ct?





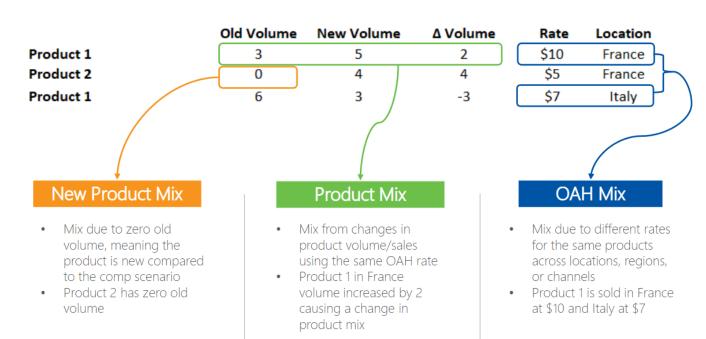
Mix Variance



Mix variance quantifies how changes in *product-level* volume impact the P&L. Mix variance occurs because each product has a unique price, cost structure, and profit level, and as each product's proportion within the portfolio changes, so does the P&L.

Importantly, product mix can change dramatically within a portfolio and have a significant P&L impact while total volume remains flat, which is why mix variance **and** volume variance are calculated.

Example:



Mix Formulas



Total Mix =

Product Mix =

Change in Product-level Volume X (Old Material OAH Variable Rate – Old Average OAH Variable Rate)



New Product Mix =

If Old Volume = 0, then New Product-level Volume X (Old Material OAH Variable Rate – Old Average OAH Variable Rate)



OAH Mix =

Change in Product-level Volume X (Old Material OME Variable Rate – Old Material OAH Variable Rate)

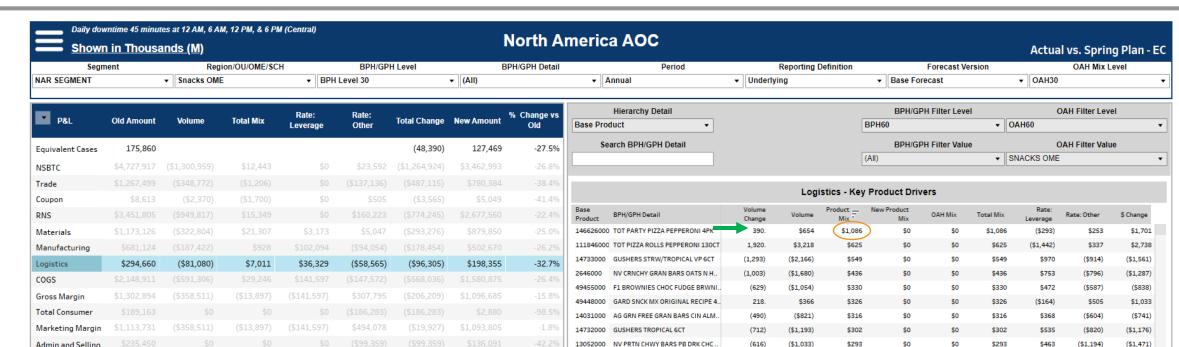
The mix variance formulas are designed to calculate the financial impact of product-level volume changes, while holding total volume, leverage, and other rate constant.

Mix Calculation – Product Mix



(\$381)

AOC Dashboard



16455000 DUNKAROOS VANILLA 6CT SUS

Rate Override Form

AOC All Rate Review (USD)

ZRPT_L01_Q005

Mgmt Entity Annual Focus Year: 2023

Focus Scenario: Actual
Comparison 1: Spring Plan
Comparison 2: Fcst as of January

Comparison 3: Actual

Attention INTL:

\$284

\$284

\$407

(\$164)

(542)

SP rates are not available/valid until SP

Change in Product-level Volume X
(Old Material OAH Variable Rate –

→ Old Average OAH Variable Rate)

Operating Profit

Product Mix =

Submit

				User Rate SI	Parent Rate Si	Parent Rate BPH Level S	Existing Rate S	Quantity SF	Amount Var. S	User Rate S0	08 P
Account Flattene	d	Material		\$	\$		\$ / EC	EC	\$	Ś	\$
4040	Logistics	146626000	TOT PARTY PIZZA PEPPERONI 4PK				3.71	739,778	2,747,767	,	
4040	Logistics	146681000	LB ORIG FNF BAR CHERRY PIE 5CT		0.33	70					
4040	Logistics	146721000	LB MINIS FNF BAR AP/CC 10CT								
4040	Logistics	146755000	LB FNF BAR MINT CHIP BROWNIE 5CT		0.33	70					Т

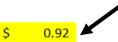
Mix Calculation – Product Mix



Income Statement Query

				FX 2023 [SP] 0012023-0122023			
OAH Op Unit			Account Fixed Variab	F	V	#	Overall Result
500051	SNACKS OU	EQC	EC			175,859,650	175,859,650
		[+] Logistics	\$	132,025,525	162,634,879		294,660,404

Snack SP Variable Logistics Rate



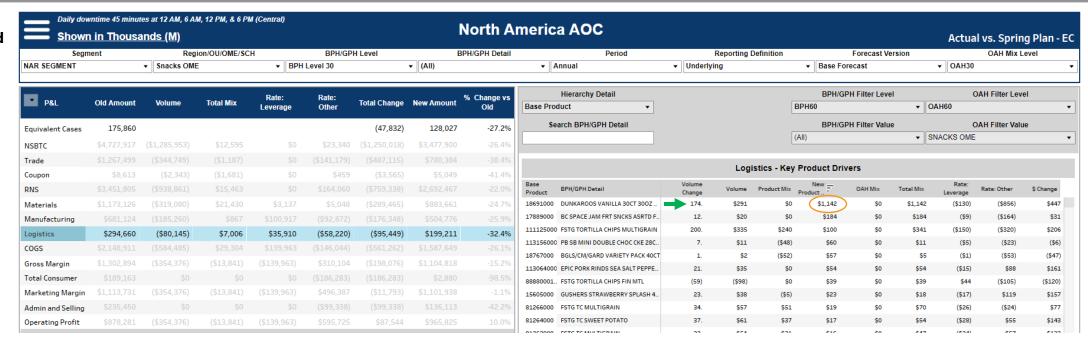


Product Mix Calc:	
Change in Product-Level Vol	390
SP (Old) Material OAH Variable Rate	\$3.71
SP (Old) Avg OAH Variable Rate	\$0.92
Product Mix	\$1,086

Mix Calculation – New Product Mix



AOC Dashboard



Focus Year: 2023

New Product Mix =

If $Old\ Volume = 0$,

- then New Product-level Volume X
- (Old Material OAH Variable Rate –
- Old Average OAH Variable Rate)

Rate Override Form

AOC All Rate Review (USD)

ZRPT_L01_Q005

Mgmt Entity Annual Focus Scenario: Actual

Comparison 1: Spring Plan
Comparison 2: Fcst as of January

Comparison 3: Actual

Attention INTL:

SP rates are not available/valid until SP

Submit

					User Rate SP	Parent Rate SP	Parent Rate BPH Level SP	Existing Rate SP	Quantity SP	Amount Var. SP	User Rate S08
	Account Flattened		Material		\$	\$		\$ / EC	EC	\$	\$
7	4040	Logistics	18691000	DUNKAROOS VANILLA 30CT 30OZ MGPK	7.50						
	4040	Logistics	18693000	BUGLES CARAMEL FS				1.48	60,916	90,289	

Mix Calculation – New Product Mix



				FX 2023 [SP] 0012023-0122023			
OAH Op Unit			Account Fixed Variab	F	V	#	Overall Result
500051	SNACKS OU	EQC	EC			175,859,650	175,859,650
		[+] Logistics	\$	132,025,525	162,634,879		294,660,404

Snack SP Variable Logistics Rate

\$ 0.92

New Product Mix =

If Old Volume = 0,



→ (Old Material OAH Variable Rate -

→ Old Average OAH Variable Rate)

Product Mix Calc:	
Change in Product-Level Vol	174
SP (Old) Material OAH Variable Rate	\$7.50
SP (Old) Avg OAH Variable Rate	\$0.92
Product Mix	\$1,142

Leverage Variance



Leverage variance is the quantification of the financial benefits or detriments from fixed cost leverage in a volume-change scenario.



It's important to understand too that each line of the P&L, each business, and each product have different levels of leverage. So, volume changes drive different leverage variance results depending on the portfolio and P&L line under review.

Leverage Formulas



Interestingly, the leverage variance formula is very similar to the volume variance formula.

Volume Variance

Change in Total Volume



Old Average Total Rate (fixed + variable)

By including old average fixed rate in the volume variance formula, it assumes fixed costs go up or down in line with volume changes, eliminating any benefits or detriments from leverage.

Leverage Variance

Total Volume

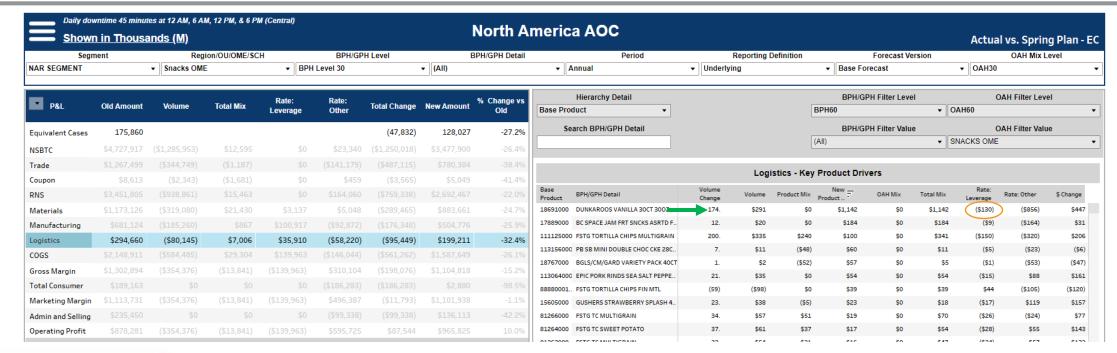


→ (Old Average Fixed Rate)

Then, the leverage variance formula backs out the fixed-cost component (notice the negative sign in the equation), which allows leverage variance to be cleanly quantified and not double counted.

Leverage Calculation





Leverage Variance

Change in Total Volume (Old Average Fixed Rate)

Then, the leverage variance formula backs out the fixed-cost component (notice the negative sign in the equation), which allows leverage variance to be cleanly quantified and not double counted.

				FX 2023 [SP] 0012023-0122023			
OAH Op Unit			Account Fixed Variab	F	V	#	Overall Result
500051	SNACKS OU	EQC	EC			175,859,650	175,859,650
		[+] Logistics	\$	132,025,525	162,634,879		294,660,404

Snacks SP Fixed Logistics Rate

0.75

Other Rate Variance



Other rate applies to every dollar or euro or yuan of revenue and expense because under every expense and sales line are *prices* of goods and services.

Furthermore, other rate captures the most diverse set of variance drivers within the AOC. Variance drivers within all the other AOC categories are straightforward. But other rate drivers are different for every line of the P&L and require the most effort to truly understand.



Other Rate Formula



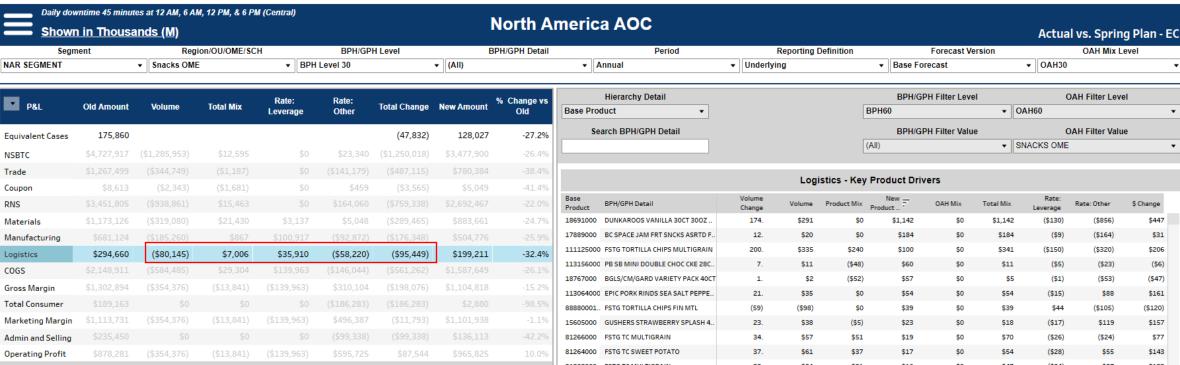


Despite Other Rate's broad and complex makeup, the calculation is very simple. Each of the previous 3 variance categories captured everything except non-leverage rate changes. So, "other rate's" variance formula can be approached by backing out the variances for the other three categories from the total variance.

Other Rate Calculation







Total Variance	Volume	Total Mix	Leverage	Other Rate
(\$95,449)	(\$80,145)	\$7,006	\$35,910	\$58,220

Missing Rate Override Form



What is it?

- Excel input form that allows users to enter product rates that will feed into the AOC calculations in the dashboard
- Allows users to identify and correct mix rates that materially impact the AOC

When do missing rates occur?

- They occur when there is a change in material volume, but the "Old/Comp scenario" does not have a \$ value to calculate mix contribution
- If there is neither a system rate nor parent average in old scenario. It is required for users to enter rates (if volume is material)

When should a user override a rate?

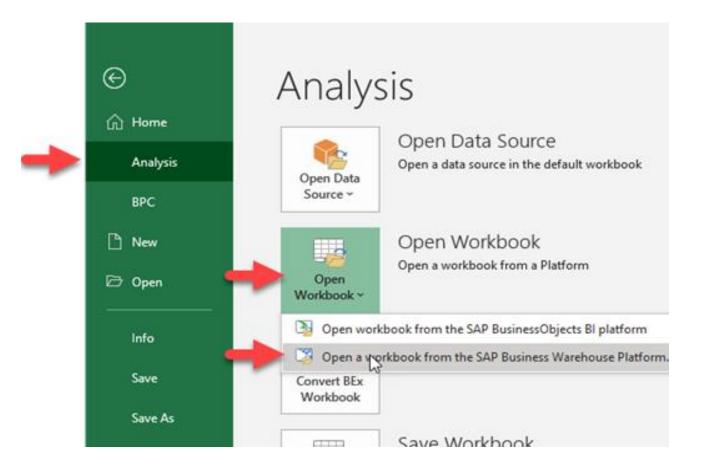
 If Parent rate doesn't represent a reasonable substitution for the product OR rate is skewed because of an unusual circumstance, then rate overrides should occur

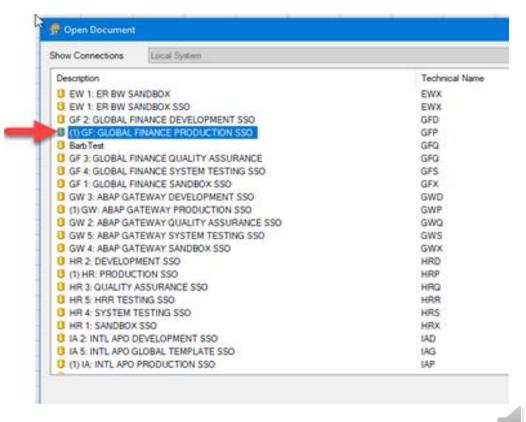
Accessing the Rate Override Form



In Excel > File > Analysis > Open Workbook > Open a workbook from the SAP Business Warehouse Platform

Select GFP - (1) GF: Global Finance Production SSO > Next





Accessing the Rate Override Form



3 Select AOC Missing Rates > Ok

AOC

Description

Technical Name

MACC Missing Rates

GMI_AOC_MISSING_RATES

GMI_AOC_SP_MISSING_RATES

GMI_AOC_SP_MISSING_RATES

Accounts for AOC Mix Rates

NSBTC 4000

Trade 4010

Coupon 4020

Materials & Manufacturing 4030 (Intl only)

Materials 5020 (NA only)

Manufacturing 5030 (NA only)

Logistics 4040

Fill in appropriate information on the Prompt Screen > OK
See new AOC Selection info on slide 3

Specify Value for Prompts								
* AOC Selection	ACCY							
* Accounts with Mix Account Flag	4000							
* OAH Op Management Entity Multi-sele	600009							
* Unit	EC							

Rate Override Example



AOC **Dashboard**



P&L	Old Amount	Volume	Total Mix	Rate: Leverage	Rate: Other	Total Change	New Amount	% Change vs Old
Equivalent Cases	175,860					(48,390)	127,469	-27.5%
NSBTC	\$4,727,917	(\$1,300,959)	\$12,443	\$0	\$23,592	(\$1,264,924)	\$3,462,993	-26.8%
Trade	\$1,267,499	(\$348,772)	(\$1,206)		(\$137,136)	(\$487,115)	\$780,384	-38.4%
Coupon	\$8,613	(\$2,370)	(\$1,700)	\$0	\$505	(\$3,565)	\$5,049	-41.49
RNS	\$3,451,805	(\$949,817)	\$15,349		\$160,223	(\$774,245)	\$2,677,560	-22.49
Materials	\$1,173,126	(\$322,804)	\$21,307	\$3,173	\$5,047	(\$293,276)	\$879,850	-25.09
Manufacturing	\$681,124	(\$187,422)		\$102,094	(\$94,054)	(\$178,454)		-26.29
Logistics	\$294,660	(\$81,080)	\$7,011	\$36,329	(\$58,565)	(\$96,305)	\$198,355	-32.79
cogs	\$2,148,911	(\$591,306)	\$29,246	\$141,597	(\$147,572)		\$1,580,875	-26.49
Gross Margin	\$1,302,894	(\$358,511)	(\$13,897)	(\$141,597)	\$307,795	(\$206,209)	\$1,096,685	-15.89
Total Consumer	\$189,163						\$2,880	
Marketing Margin	\$1,113,731	(\$358,511)	(\$13,897)	(\$141,597)	\$494,078	(\$19,927)	\$1,093,805	-1.89
Admin and Selling	\$235,450						\$136,091	-42.29
Operating Profit	\$878,281	(\$358,511)	(\$13,897)	(\$141,597)	\$593,437	\$79,433	\$957,713	9.09

				_						
Sea	arch BPH/GPH Detail		BPH/GF	H Filter Valu	e	c	AH Filter Valu	ıe		
				(,	All)		•	SNACKS OME		
			Logi	stics - Key	Product Driv	ers				
Base Product	BPH/GPH Detail	Volume Change	Volume	Product =	New Product Mix	OAH Mix	Total Mix	Rate: Leverage	Rate: Other	\$ Change
146626000	TOT PARTY PIZZA PEPPERONI 4PK	390.	\$654	\$1,086	\$0	\$0	\$1,086	(\$293)	\$253	\$1,701
111846000	TOT PIZZA ROLLS PEPPERONI 130CT	1,920.	\$3,218	\$625	\$0	\$0	\$625	(\$1,442)	\$337	\$2,738
14733000	GUSHERS STRW/TROPICAL VP 6CT	(1,293)	(\$2,166)	\$549	\$0	\$0	\$549	\$970	(\$914)	(\$1,561)
2646000	NV CRNCHY GRAN BARS OATS N H	(1,003)	(\$1,680)	\$436	\$0	\$0	\$436	\$753	(\$796)	(\$1,287)
49455000	F1 BROWNIES CHOC FUDGE BRWNI	(629)	(\$1,054)	\$330	\$0	\$ 0	\$330	\$472	(\$587)	(\$838)
49448000	GARD SNCK MX ORIGINAL RECIPE 4	218.	\$366	\$326	\$0	\$ 0	\$326	(\$164)	\$505	\$1,033
14031000	AG GRN FREE GRAN BARS CIN ALM	(490)	(\$821)	\$316	\$0	\$ 0	\$316	\$368	(\$604)	(\$741)
14732000	GUSHERS TROPICAL 6CT	(712)	(\$1,193)	\$302	\$0	\$0	\$302	\$535	(\$820)	(\$1,176)
13052000	NV PRTN CHWY BARS PB DRK CHC	(616)	(\$1,033)	\$293	\$0	\$ 0	\$293	\$463	(\$1,194)	(\$1,471)
16455000	DUNKAROOS VANILLA 6CT SUS	(542)	(\$908)	\$284	\$0	\$0	\$284	\$407	(\$164)	(\$381)

Rate Override **Form**

AOC All Rate Review (USD)

ZRPT_L01_Q005

Mgmt Entity Annual Focus Year: 2023

Focus Scenario: Actual Comparison 1: Spring Plan

Comparison 2: Fcst as of January

Comparison 3: Actual

Attention INTL:

SP rates are not available/valid until SP

Submit

											_
				User Rate Si	Parent Rate Si	Parent Rate BPH Level S	Existing Rate S	Quantity SP	Amount Var. S	User Rate S08	P
Account Flattene	d	Material		\$	\$		\$ / EC	EC	\$	\$	
4040	Logistics	146626000	TOT PARTY PIZZA PEPPERONI 4PK				3.71	739,778	2,747,767		
4040	Logistics	146681000	LB ORIG FNF BAR CHERRY PIE 5CT		0.33	70					
4040	Logistics	146721000	LB MINIS FNF BAR AP/CC 10CT								
4040	Logistics	146755000	LB FNF BAR MINT CHIP BROWNIE 5CT		0.33	70					

Product Mix =

Change in Product-level Volume X

(Old Material OAH Variable Rate -

Old Average OAH Variable Rate)

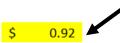
Rate Override Example



Income Statement Query

				FX 2023 [SP] 0012023-0122023			
OAH Op Unit			Account Fixed Variab	F	V	#	Overall Result
500051	SNACKS OU	EQC	EC			175,859,650	175,859,650
		[+] Logistics	\$	132,025,525	162,634,879		294,660,404

Snack SP Variable Logistics Rate



Product Mix =

Change in Product-level Volume

(Old Material OAH Variable Rate −

Old Average OAH Variable Rate)

Product Mix Calc:	
Change in Product-Level Vol	390
SP (Old) Material OAH Variable Rate	\$3.71
SP (Old) Avg OAH Variable Rate	\$0.92
Product Mix	\$1,086

Rate Override Example



- If we think the material rate is incorrect, we can override it and then it'll feed into the AOC calc
- Let's say the correct rate is \$2.00..

AOC All Rate Review (USD)

ZRPT_L01_Q005

Mgmt Entity Annual Focus Year: 2023

Focus Scenario: Actual Comparison 1: Spring Plan Comparison 2: Fcst as of January

Comparison 3: Actual

Attention INTL:

SP rates are not available/valid until SP

Submit

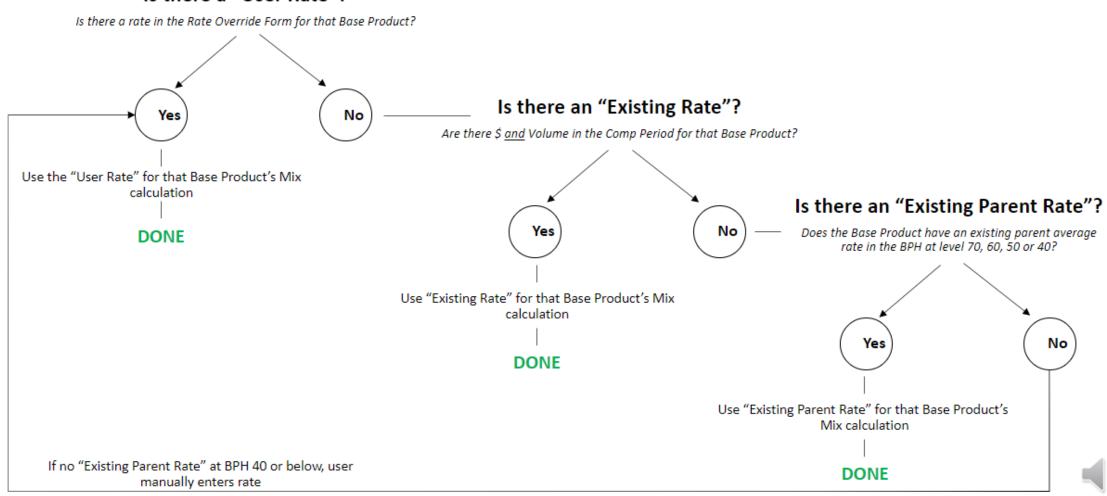
				User Rate S	Parent Kate	SF	Parent Rate BPH Level S	Existing Rate S	Quantity SP	Amount Var. Sl	User Rate S08
Account Flattene	d	Material		\$		\$		\$ / EC	EC	\$	\$
4040	Logistics	146626000	TOT PARTY PIZZA PEPPERONI 4PK	2.00				3.71	739,778	2,747,767	
4040	Logistics	146681000	LB ORIG FNF BAR CHERRY PIE 5CT		0.3	33	70				
4040	Logistics	146721000	LB MINIS FNF BAR AP/CC 10CT								
4040	Logistics	146755000	LB FNF BAR MINT CHIP BROWNIE 5CT		0.3	33	70				

Product Mix Calc:	
Change in Product-Level Vol	390
SP (Old) Material OAH Variable Rate	\$2.00
SP (Old) Avg OAH Variable Rate	\$0.92
Product Mix	\$421

Decision Tree Logic



Is there a "User Rate"?



Poll



Have you used the AOC DASHB query?

AOC DASHB Query



- It is the excel version of the AOC dashboard
- You can access the query through AFO
- Let's you see all three comparison scenarios side by side (SP, Estimate, Last Year)
- Good for deeper analysis of AOC
- Watchout: The AFO query updates every 2 hours and Tableau updates every 6 hours. Depending on timing, you might see discrepancies in the tools.

Links To Trainings



- All training material and link to dashboards can be found on go/financedash
- AOC Concepts Training
- AOC Missing Rates Training
- AOC DASHB Training

Survey



https://forms.office.com/Pages/ResponsePage.aspx?id=6MwzDDylpUu2FTSm4rj_OFtMqG28KiJHvUrl4hMbn3xUNUpVQjRJMVU1TTZMTDhOV0IDUVRKNFBNMi4u

