

Fill Rate Notes

Thursday, February 6, 2025 3:42 PM

Feb5th

Next steps:

Finish changing data types

Create FillRate measure

Create CancelRate measure

Create OpenRate measure

Create visual cards in PowerBI

Publish to UAT



Model for Fill Rate Report

245pm



ACTUAL TABLE NAMES

CustPackingSlipVw = a inner join of AMG_CustPackingSlipTransStaging and SalesOrderLineV2Staging on InventTransID and DataAreAid followed by a join with SalesOrderHeaderV3Staging on SalesOrderNumber and DataAreAid

CustPickListVw = is a inner join of AMG_WMSOrderTransStaging and SalesOrderLineV2Staging on INVENTTRANSID and DataAreAid followed by a join with SalesOrderHeaderV3Staging on SALESORDERNUMBER and DataAreAid

OrdersCancellationsVw = a inner join of suncan and SalesOrderLineV2Staging on DATAAREAID and Lot Line followed by a inner join with SalesOrderHeaderV3Staging on DataAreAid and SalesOrderNumber

OrdersVw = a join of SalesOrderHeaderV3Staging and SalesOrderLineV2Staging on SalesOrderNumber and DataAreAid

ProductVw = is a series of joins

Productvv - is a series of joins



salesOrderLine =is a join with SalesOrderLineV2Staging and SalesOrderHeaderV3Staging on DataAreaId and SalesOrderNumber

EcoResReleasedProductV2Staging PM

InventProductGroupStaging PG

EcoResReleasedProductVariantV2Staging PV

EcoResProductV2Staging Product

PivotedAttributes PA

EcoResProductSpecificUnitOfMeasureConversionStaging

EcoResProductBarcodeV2Staging

AMG_CustPackingSlipTransStaging

AMG_WMSOrderTransStaging

SalesOrderLineV2Staging

SalesOrderHeaderV3Staging

FROM WES

SHOULD USE THESE TABLES

1. AMG_CustPackingSlipTransStaging
2. AMG_WMSOrderTransStaging
3. SalesOrderLineV2Staging
4. SalesOrderHeaderV3Staging
5. EcoResReleasedProductV2Staging
6. EcoResReleasedProductVariantV2Staging
7. SUN_Cancellation_log table (Whatever the entity name is) ; may be sunBI_Fact_Sales_SCS_Cancellations_Staging, or we need to publish this one: ASISalesOrderLineCancellationStaging)

3:25pm loading in corrected tables



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February 6th, 2025

Define the DAX Formulas

Filled = (summation of total shipped qty / summation of total ordered qty) *100

Open = ((total ordered - total shipped - total canceled) / total ordered qty) * 100

Cancelled = (summation of total canceled qty / summation of total ordered qty) * 100

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Understanding the current formulas

%Fill Rate =

```
DIVIDE (
    SUM ( Orders[Cancel Rate Dem] ),
    SUM ( Orders[Cancel Rate Dem] ) )
- DIVIDE ( SUM ( Orders[Cancel Rate Num] ), SUM ( Orders[Cancel Rate Dem] ) )
```

'.Cancel'[Cancel] (refers to the Cancel first column of a table measure called .Cancel

```
Cancel = { ("$Cancel Allstar", NAMEOF('Measure'[$Cancel by ASM]), 0),
            ("$Cancel Cust", NAMEOF('Measure'[$Cancel by Cust]), 1),
            ("Ord Allstar Cancel Units", NAMEOF('Measure'[Ord ASM Cancel Units]), 2),
            ("Ord Cust Cancel Units", NAMEOF('Measure'[Ord Customer Cancel Units]), 3),
            ("%Cancel", NAMEOF('Measure'[%Cancel]), 4)
        }
```



%Cancel =

```
DIVIDE (
    SUM ( Orders[Cancel Rate] ),
    SUM ( Orders[Divisor] ) )
```

(Divisor holds a value of 1 across orders to act as a 'whole' to the equation with Cancel Rates varying in 1's and 0's to result in part over whole)

\$ASM Cancel =
SUM (OrdersCancellationsVw[ASM Cancel Amount])

\$Cust Cancel =
SUM (OrdersCancellationsVw[Customer Cancel Amount])

ASM Cancel =
SUM (OrdersCancellationsVw[ASM Cancel])

Cust Cancel =
SUM (OrdersCancellationsVw[Customer Cancel])

Canceled QTY Trans Units Ttl =
[\$ASM Cancel] + [Cust Cancel]

ABSOLUTE LINES STATUS

1 = 1 Invoiced

2=Deliverd

3=Invoice

4=Open Order

May need to check out the in inventory transactions
Invent trans table will have all but the cancel lines

Use the physical date for the packing slip(ship date)

THINK ABOUT THIS

Invent Trans is the lowest level

It is even lower than the sales line

Because a line can be split with partial actions

This all ties back to the Lot ID

On INVENT TRANS

Note

REFERENCEID

REFERENCECATEGORY

STATUS ISSUE CANNOT BE BLANK

Deducted is delivered

On order is open

Sold is invoiced



Example: by lot id show me how much filled, open, invoiced, then can join with the cancels

Use the Original Qty on the Sales Order Line

ORDEREDSALESQUANTITY is the original quantity with no regard to cancels.

Issue statuses:

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Feb 13, 2025

Ship - fill rate is cancel

Out of Stock fill rate code is the one to focus on(OOS)

What about Late or other Cancel Reason Codes?

Fill rate is a kpi to see how ops or planning is doing

Which of ASM Cancel to include?

- 1) ASM-OOS
- 2) ASM-ProdQA
- 3) ASM-CB4Del
- 4) ASM-DC Cn
- 5) SALES

Which of ASM Cus Cancel to include?

- 1) None of them

True Cancel ASM = (the above codes)



From <<https://teams.microsoft.com/v2/>>

2:30pm Session with Wes to identify tables and columns that will make up the equation

Fill Rate



AND DEDUCTED FOR STATUS ISSUE

Same table invent trans
The DATE PHYSICAL is the packing slip date

Shipped Measure (Done)

Cancel Measure

Open Measure

Fill Rate

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What we have
Shipped

```
LineTrueASMCancel =  
IF( 'sunbicancel...'[ASMCancel] = "ASM-OOS" || ASMCANCEL = "ASM-ProdQA" || "ASM-CB4Del" || "ASM-DC" || "SALES"  
Then return sum( [ QUANTITYCANCELLED]
```

Sumx

Filter ,

)

REFERENCECATEGORY Sales order
STATUSISSUE Deducted Sold

ORDEREDSALESQUANTITY

Step 1: Create the Rolling Shipped Quantity Measure

This sums the shipped quantity over the last **3 months** dynamically:

```
RollingShippedQty =  
CALCULATE(  
    SUM(Orders[ShippedQty]),  
    DATESINPERIOD(Orders[OrderDate], MAX(Orders[OrderDate]), -3, MONTH)  
)
```

Step 2: Create the Rolling Total Order Quantity Measure

This sums both shipped and canceled quantities over the rolling **3-month** period:

```
RollingTotalQty =  
CALCULATE(  
    SUM(Orders[ShippedQty]) + SUM(Orders[CancelledQty]),  
    DATESINPERIOD(Orders[OrderDate], MAX(Orders[OrderDate]), -3, MONTH)  
)
```

Step 3: Create the Rolling Fill Rate Measure

This calculates the **rolling fill rate** dynamically:

```
RollingFillRate =  
VAR Shipped = [RollingShippedQty]  
VAR TotalOrders = [RollingTotalQty]
```

```
RETURN  
IF(TotalOrders > 0, (Shipped / TotalOrders) * 100, BLANK())
```

3. Visualizing the Rolling Fill Rate in Power BI

1. Create a Line Chart:

- X-Axis: OrderDate (Monthly or Weekly)
- Y-Axis: RollingFillRate
- Filters: Add slicers to adjust the date range dynamically.

2. Table or Matrix:

- Add OrderDate, ShippedQty, CancelledQty, RollingFillRate
- This will show both **monthly** and **rolling fill rate** trends.

3. KPI Card:

- Show the **most recent rolling fill rate** for quick insights.

4. Adjusting the Rolling Window

To change the rolling period:

- **For 6 months:** Change -3, MONTH → -6, MONTH
- **For 12 months:** Change -3, MONTH → -12, MONTH

Example for a **6-month rolling fill rate**:

```
RollingShippedQty =  
CALCULATE(  
    SUM(Orders[ShippedQty]),  
    DATESINPERIOD(Orders[OrderDate], MAX(Orders[OrderDate]), -6, MONTH)  
)
```

5. Bonus: Handling Data Gaps

If you have **missing months**, replace DATESINPERIOD with DATESBETWEEN to handle custom date ranges:

```
RollingShippedQty =  
CALCULATE(  
    SUM(Orders[ShippedQty]),  
    DATESBETWEEN(Orders[OrderDate], TODAY() - 90, TODAY())  
)
```

This ensures the calculation dynamically adjusts to **actual available data**.

```
LineTrueASMCancel =  
SUMX(  
    FILTER(  
        sunBI_Fact_Sales_SCS_Cancellations_Staging,  
        sunBI_Fact_Sales_SCS_Cancellations_Staging[ASMCancel] IN {"ASM-OOS", "ASM-ProdQA", "ASM-CB4Del", "SALES",  
"ASM-DC Cn"} ),  
    sunBI_Fact_Sales_SCS_Cancellations_Staging[QUANTITYCANCELLED]  
)
```

```
RollingShippedQty =  
CALCULATE(  
    SUM(AMG_InventTransStaging[QTY]),  
    DATESINPERIOD(  
        DateTable[Date],  
        MAX(DateTable[Date]),
```

```

-12, MONTH
),
AMG_InventTransStaging[REFERENCECATEGORY] IN {"Sales order"},
AMG_InventTransStaging[STATUSISSUE] IN {"Deducted", "Sold"}
)

RollingTrueASMCancel =
CALCULATE(
    SUM(sunBI_Fact_Sales_SCS_Cancellations_Staging[QUANTITYCANCELLED]),
    FILTER(
        sunBI_Fact_Sales_SCS_Cancellations_Staging,
        sunBI_Fact_Sales_SCS_Cancellations_Staging[ASMCancel] IN {"ASM-OOS", "ASM-ProdQA", "ASM-CB4Del",
"SALES", "ASM-DC Cn"}
    ),
    DATESINPERIOD(
        DateTable[Date],
        MAX(DateTable[Date]), -12, MONTH
    )
)

RollingTrueASMCancel =
CALCULATE(
    SUM(sunBI_Fact_Sales_SCS_Cancellations_Staging[QUANTITYCANCELLED]),
    DATESINPERIOD(
        DateTable[Date],
        MAX(DateTable[Date]),
        -12, MONTH
    ),
    sunBI_Fact_Sales_SCS_Cancellations_Staging[ASMCancel] IN {"ASM-OOS", "ASM-ProdQA", "ASM-CB4Del", "SALES",
"ASM-DC Cn"}
)
=====

RollingShippedQty =
CALCULATE(
    -(SUM(AMG_InventTransStaging[QTY])),
    DATESINPERIOD(
        DateTable[Date],
        IF(MAX(DateTable[Date]) < TODAY(), MAX(DateTable[Date]), TODAY()),
        -12, MONTH
    ),
    AMG_InventTransStaging[REFERENCECATEGORY] IN {"Sales order"},
    AMG_InventTransStaging[STATUSISSUE] IN {"Deducted", "Sold"}
)

RollingTrueASMCancel =
CALCULATE(
    SUM(sunBI_Fact_Sales_SCS_Cancellations_Staging[QUANTITYCANCELLED]),
    DATESINPERIOD(
        DateTable[Date],
        IF(MAX(DateTable[Date]) < TODAY(), MAX(DateTable[Date]), TODAY()),
        -12, MONTH
    ),
    sunBI_Fact_Sales_SCS_Cancellations_Staging[ASMCancel] IN {"ASM-OOS", "ASM-ProdQA", "ASM-CB4Del", "SALES",
"ASM-DC Cn"}
)

RollingFillRate =
VAR Shipped = [RollingShippedQty]

```

```
    ),  
    sunBI_Fact_Sales_SCS_Cancellations_Staging[ASMCancel] IN {"ASM-OOS", "ASM-ProdQA",  
"ASM-CB4Del", "SALES", "ASM-DC Cn"}  
)
```

```
RollingFillRate =  
VAR Shipped = [RollingShippedQty]  
VAR Cancelled = [RollingTrueASMCancel]  
VAR TotalOrders = Shipped + Cancelled  
RETURN  
IF(TotalOrders > 0, (Shipped / TotalOrders) * 100, BLANK())
```

WE MUST MENTION THAT ALEX USED THE REQUESTED SHIP DATE AND WE ARE USING THE ACTUAL DATES

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1pm Feb 18 Meeting with Nicole for approval of published Fill Rate Report
[Fill Rate Percentage - Power BI](#)

WE MUST MENTION THAT ALEX USED THE REQUESTED SHIP DATE AND WE ARE USING THE ACTUAL DATES

We are supposed to also show breakdown by reason code on screen?

We need an overview by cancel code
Another visual by item and cancel code per period

Month to date
Make the chart with top 10
1 table with fill rate by customer, with a drill down, add a brand in front of product search name
Brand down to product name to item

What if we remove the right side bar chart and on the right we can put a visual by brand and by item, that would show fill rate not cancel rate

You told Terri Cancel has to be re done and she will get an answer of an update by Friday

Notes from Call:

Thank you everyone for joining the call today, here is a recap of what we discussed.

-ASM Codes to be included:

ASM-CB4Del
ASM-OOS
SALES

-CUS Codes to be included:

CUS-Cncl
CUS-Dupl
CUS-QtyErr
CUS-WRGSKU

Codes that are currently used in the published Fill Rate Percentage that will be removed, not to be included:

ASM-ProdOA

ASM-DC Cn
CUS-PmntEr
CUS-PrErr
CUS-ShpAdr

Additional Requests:

- In our main visual we would like to see a hierarchy following
Customer Name -> Account Number -> Brand -> Product Search Name -> Item Number
- Replace the "Fill Rate by Year and Month" visual with a matrix that follows a hierarchy
following:
Brand -> Product Search Name -> Item Number
This visual should display the top 5 Filled Items.

If is dimension value of fin dim table matching brand of sales line table then give me
description

Have to make sure you can use the fin dim table and make the calculation

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Feb 20

How to aggregate or add up ships and cancels from a lot line as the day goes on