



# THE ART OF

# DAX

## PROVEN BEST PRACTICES

## PART-04

# POWER BI

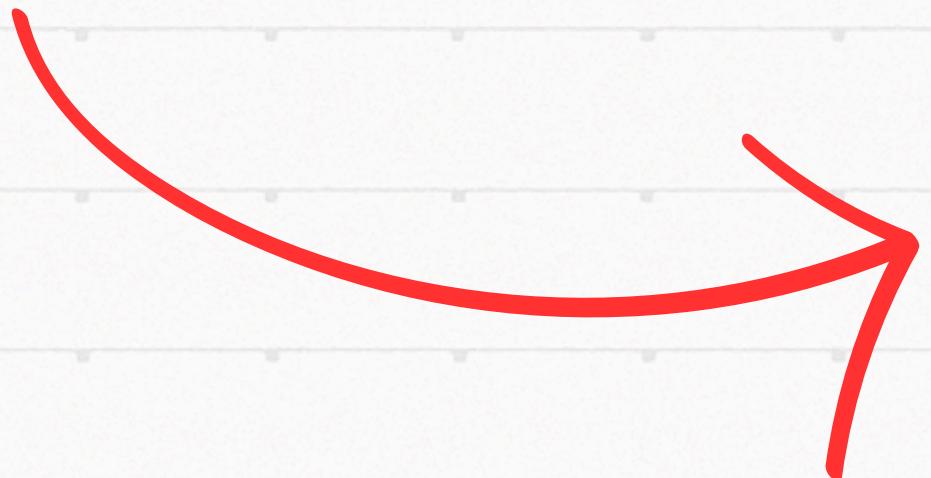


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**DO YOU USE DAX?  
WANT TO KNOW SOME GOOD PRACTICES?**

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# GOOD PRACTICES IN DAX

1. FORMATTING
2. COMMENTING
3. SHORTCUTS
4. VARIABLES
5. MEASURE TABLE



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# VARIABLES IN DAX

What is a Variable?

Variables are used to store and manipulate values within DAX.

They provide flexibility and improve the readability and maintainability of complex DAX expressions.



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# VARIABLES IN DAX

## Syntax & variable Declaration:

To declare a variable in DAX, you use the **VAR** keyword followed by the **variable name**, an **equal sign**, and the expression or value assigned to the variable.

To complete the Loop you need to Write **RETURN** statement to define calculation.

```
1 Var Example =
2 VAR NameofVariable = 100
3 VAR Secondname = 200
4 RETURN
5 NameofVariable + Secondname
```



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# VARIABLES IN DAX

Syntax & variable Declaration:

- it is not Mandatory to always write the last variable name after **RETURN** Statement.

```
1 Var Example =
2 VAR Variable1 = 100
3 VAR Variable2 = 200
4 RETURN
5 Variable1
```



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# VARIABLES IN DAX

## Syntax & variable Declaration:

- It is not Mandatory to write any Variable name after **RETURN**, You can also start another calculation.

```
1 Var Example =
2 VAR Variable1 = 100
3 VAR Variable2 = 200
4 RETURN
5 SUMX('Sales by Store',
6     'Sales by Store'[quantity_sold]*'Sales by Store'[unit_price]
7 )
```



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# VARIABLES IN DAX

## Nested Variable:

- We can also Declare variable inside another variable.(Nested Variable)

```
1 Var Example =
2 VAR Variable1 = 100
3 VAR Variable2 =
4     VAR Variable21 =    10
5     VAR Variable22 =   20
6     Return
7     Variable21*Variable22
8 RETURN
9 Variable1+Variable2
```



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# VARIABLES IN DAX

## Important Note:

- Once the variable declared it will not recalculate again when you use that variable.

DAX :

```
1 Sales by ID A =  
2 VAR Totalsales =  
3 SUM(  
4     SALES[VALUE]  
5 )  
6 RETURN  
7 CALCULATE(  
8     Totalsales,  
9     SALES[ID] = "A"  
10 )
```

DAX :

```
1 Sales by ID A =  
2 VAR Totalsales =  
3 CALCULATE(  
4     SUM(  
5         SALES[VALUE]  
6     ),  
7         SALES[ID] = "A"  
8 )  
9 RETURN  
10 Totalsales
```

RESULT:

700

Sales by ID A

RESULT:

100

Sales by ID A



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# VARIABLES IN DAX

## Important Note:

- We can only use Variable once It is declared,
  - You can not use same variable in same line until it is declared.
- We can not use Variable once loop is closed.
  - Once you close Variable Loop with RETURN statement you can not use that variable.
- Declared Variable can be used in same DAX function only.
  - VAR1 is Declared in Measure1 so we can use that variable only in Measure1 not in measure2



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# VARIABLES IN DAX

## Benefits of Variable in DAX:

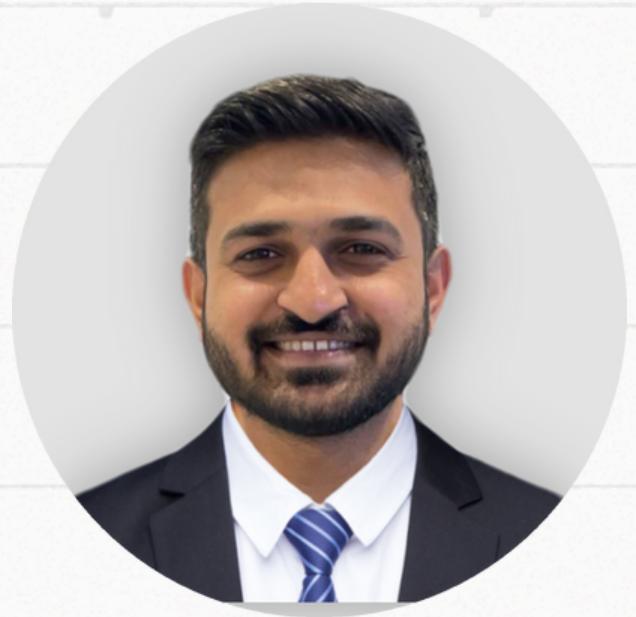
- **Code Efficiency:** By storing intermediate results in variables, you can reuse those values multiple times within a formula.
- **Easy for Complex Calculations:** Variables enable you to break down complex calculations into smaller, manageable parts.
- **Easier Debugging:** Variables play a crucial role in troubleshooting and debugging DAX formulas.
- **Readability and Maintainability:** Variables improve the readability of DAX formulas by allowing you to assign meaningful names to intermediate results or complex expressions.



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**Pushkar Bhamare**



**Pushkar Bhamare**  
**@your\_datacatalyst**

**Struggling with Excel or  
Power BI?**

**Let's fix it together**

**Tap the link in bio and let's talk.**



**Save now, thank yourself later.**