

# Power Platform World Tour

PowerBIUG PowerAppsUG FlowUG



# Just Thorning Blindbæk



# Just Thorning Blindbæk

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# Agenda

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- The background of Paginated Reports
- Strengths and weaknesses of Paginated Reports
- How to create a report
- How to publish and distribute
- The future of Paginated Reports



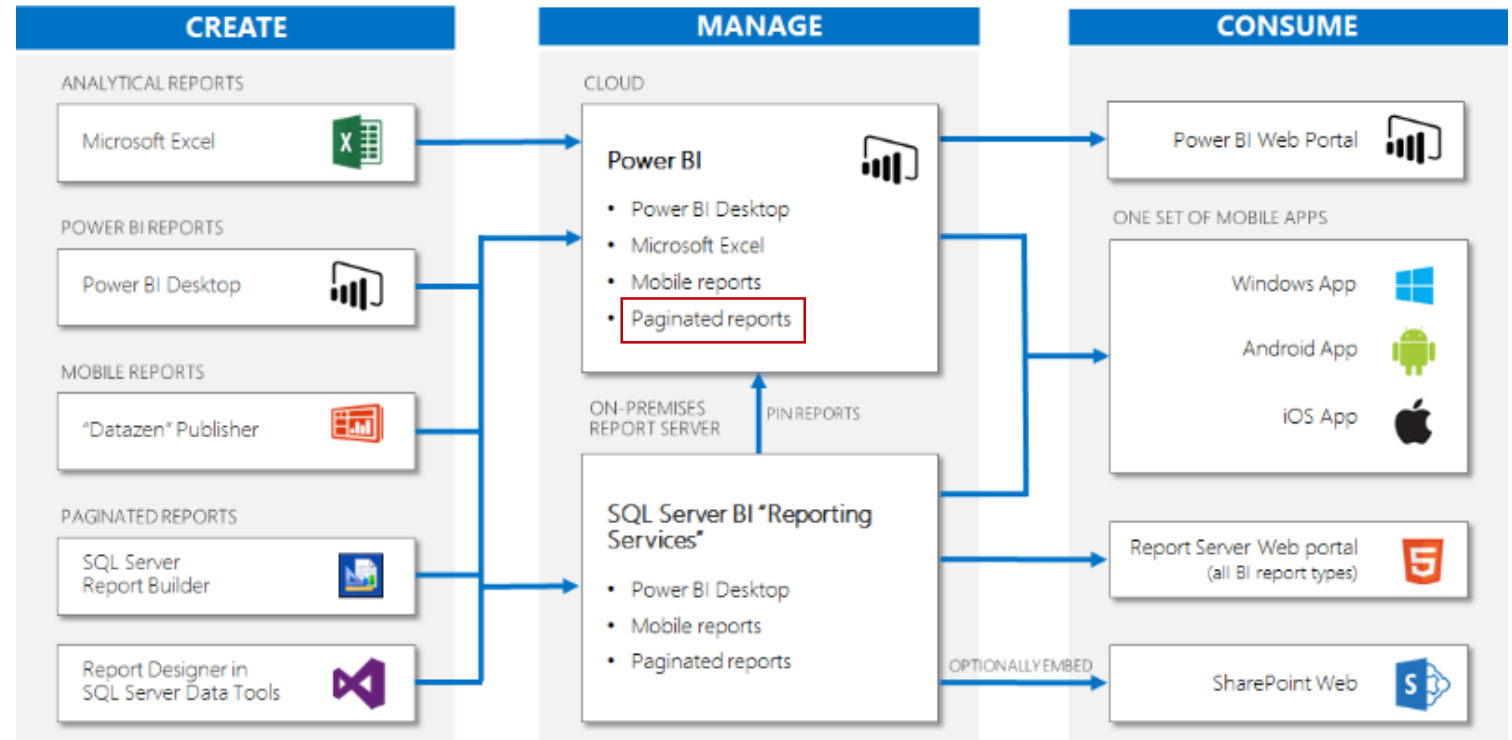




# The background of Paginated Reports

# Pixel perfect print friendly paginated reports

- Been around for years...
  - SQL Server 2000
  - Now GA in Power BI
- The Swiss Army Knife



Microsoft Reporting Roadmap, October 2015

A large audience is seated in a conference hall, facing a stage with presentation screens. The room has a high ceiling with recessed lighting and large windows on the right side. The audience is diverse in age and appearance, and many are looking towards the stage. The overall atmosphere is professional and focused.

# Strengths and weaknesses

# Strengths

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- Paginated
- Print friendly
- Pixel perfect
- Multiple export formats
- Parametrized subscriptions

# Weaknesses

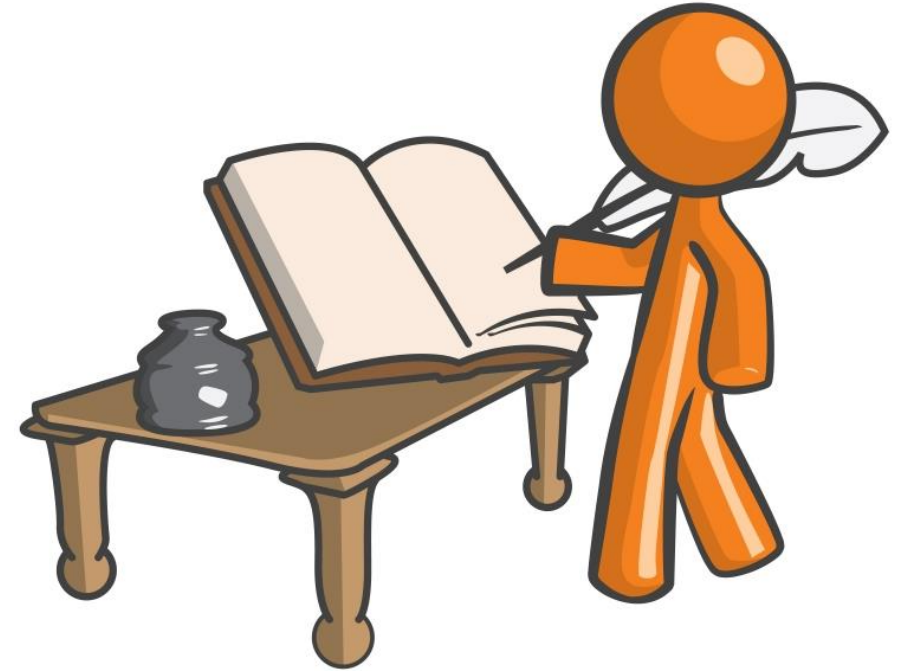
- Require premium
- Additional development tool



# Use cases

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- Migration scenarios
- Complement to Power BI reports
- Print, print, print
- Push reports and/or data
- Export without row limits
- Multiple live connections in the same report

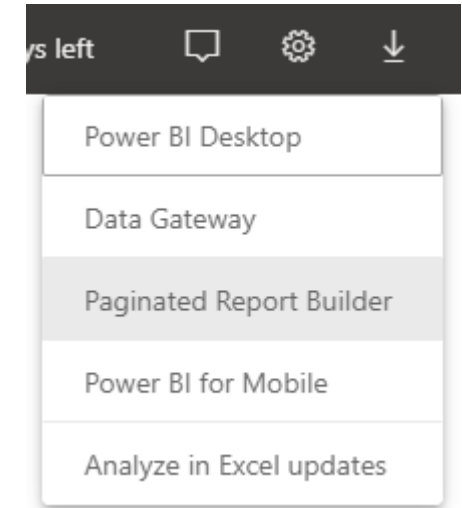


# How to create a report

A large audience is seated in a conference hall, facing a stage with presentation screens. The room is modern with a high ceiling and large windows. The audience is diverse in age and appearance, and many are looking towards the stage. The stage features two large projection screens displaying content, and a person is visible standing near the screens.

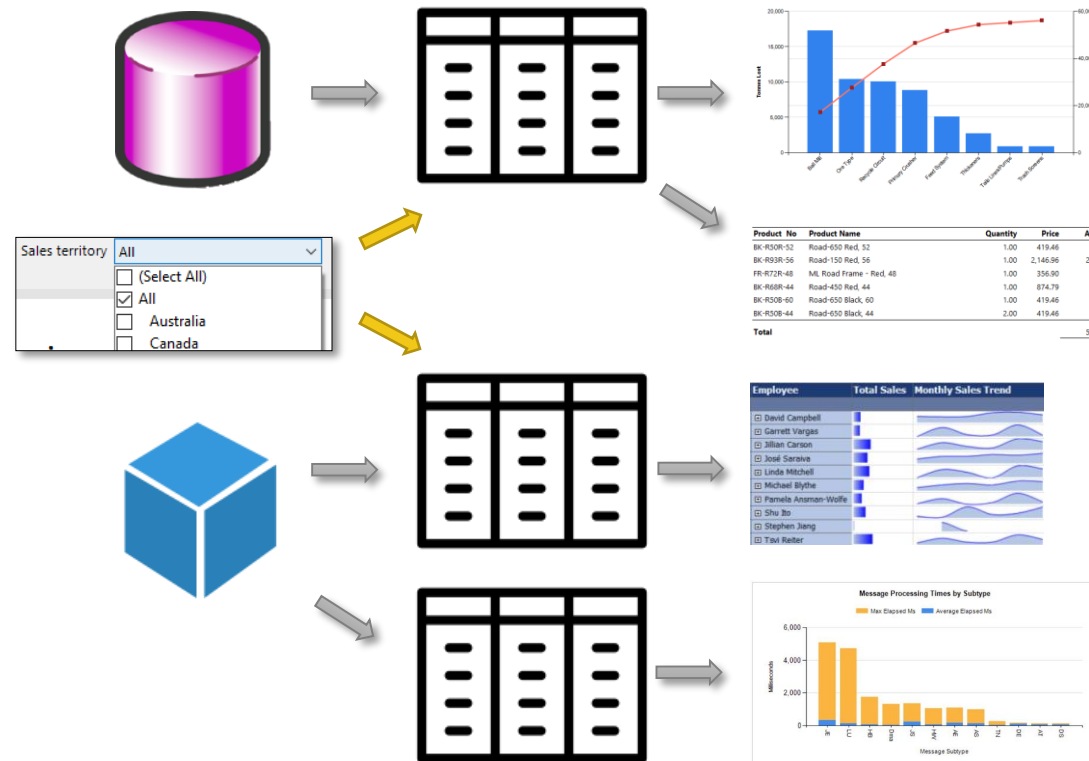
# Power BI (Paginated) Report Builder

- Another development tool
  - SQL Server Report Builder + additional features
  - Not as user friendly as Power BI Desktop
- Download and install
  - Updated frequently
- Free – don't require Premium
  - Try it out!



# Report objects

- Data source
  - Connection string
- Dataset
  - Just a flat table
- Parameter
  - Input filter
- Data region
  - Tablix, chart



- Parameters
  - FromDateFullDateAlternateKey
  - ToDateFullDateAlternateKey
  - SalesTerritorySalesTerritoryCountry
  - SalesSalesOrderNumber
- Images
  - AWLogo
- Data Sources
  - My Workspace\DS Sales
- Datasets
  - SalesTerritorySalesTerritoryCountry
    - SalesTerritoryCountry
    - ParameterCaption
    - ParameterValue
    - ParameterLevel
    - ParameterCaptionIndented
  - dsOrders

# Data sources for the Power BI Developer

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Reuse what you have already build!

- Power BI Datasets
  - Premium
  - Non-premium
- Analysis Services
  - On-prem (Tabular and MOLAP)
  - Azure
- Other sources
  - SQL Server On-prem
  - Azure SQL DB
  - Azure SQL DW
  - Oracle
  - Teradata



# Datasets

- Not a Model
- No import mode
- Just a query
  - Live/direct connection
  - Returns a flat table
- Query designer
  - Generates DAX or SQL

The screenshot shows the 'Query Designer' window in Power BI. The left pane displays the 'Model' tree with 'Sales' selected. The main area shows a DAX query with the following table:

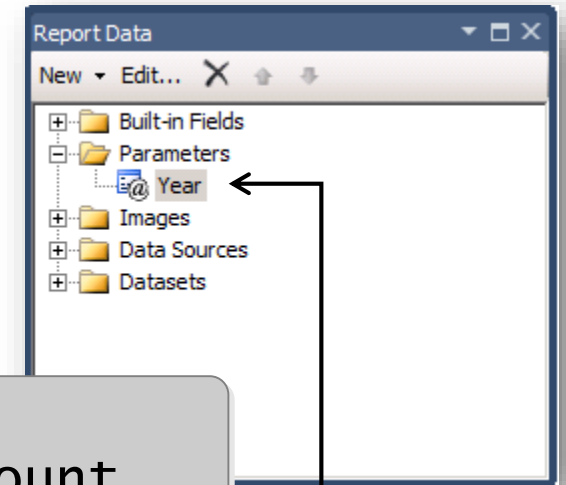
Dimension	Hierarchy	Operator	Filter Expression	Parameter
Date	FullDateAlternateKey	Range (Inclusive)	1/1/2005 : 12/31/2014	<input checked="" type="checkbox"/>
SalesTerritory	SalesTerritoryCountry	Equal	{ All }	<input checked="" type="checkbox"/>
Sales	SalesOrderNumber	Equal	{ All }	<input checked="" type="checkbox"/>

Status	CustomerPONumber	SalesOrderNumber	OrderQuantity	CarrierTrackingNumber	ProductAlternateKey	Product
Current	PO18009186470	SO43663	1	1E90-4FBF-B6	BK-R50R-60	Road-6
Current	PO16008173883	SO43666	1	D46A-40CA-8D	BK-R50R-52	Road-6
Current	PO16762199940	SO43859	1	2C16-4AA6-B4	LJ-0192-L	Long-S
Current	PO12557127067	SO43872	1	52FF-45CD-9B	BK-R50R-48	Road-6
Current	PO7656175368	SO43912	1	69B6-46F8-A4	BK-R68R-44	Road-4
Current	PO18009181739	SO44281	1	13EE-4DFE-93	BK-R50B-52	Road-6
Current	PO16008112311	SO44286	1	27D8-4398-9C	BK-R68R-44	Road-4
Current	PO16762152605	SO44500	1	E9A4-477A-83	BK-R50R-48	Road-6
Current	PO16037162003	SO44505	1	5D07-4BE7-A6	FR-M945-52	HL Mo
Current	PO12557171689	SO44521	1	E46D-4692-AC	BK-R50R-58	Road-6
Current	PO4698173942	SO44548	1	3A3B-4572-8F	BK-R50B-58	Road-6
Current	PO16095186445	SO44753	1	3015-48E8-85	FR-R72R-48	ML Roa
Current	PO4002147144	SO44781	1	32AD-4737-BB	CA-1098	AWC Lc
Current	PO18009115235	SO45040	1	8354-423A-A8	BK-R50B-52	Road-6
Current	PO16008114038	SO45044	1	DC47-40A2-8F	BK-R50R-52	Road-6
Current	PO6728123661	SO45073	1	7EBC-48E3-90	BK-R50R-48	Road-6
Current	PO16762133534	SO45286	1	AE6F-4379-99	BK-R68R-58	Road-4
Current	PO12499190711	SO45301	1	0BA8-4928-A7	FR-R38R-62	LL Roac
Current	PO4553175399	SO45325	1	5C87-4ACC-B0	BK-R50R-60	Road-6
Current	PO7656113434	SO45339	1	1F94-40D0-86	BK-R50R-62	Road-6

# Parameters

- Report Parameters
  - Values specified when rendering a report
  - By a user viewing a report interactively
  - In a report subscription
- Dataset/query Parameters
  - Used to restrict query results
  - Mapped to a report parameter



```
-- Dataset query  
SELECT SalesOrderNumber, SalesAmount  
FROM FactInternetSales  
WHERE YEAR(OrderDate) = @Year
```

# Data regions

Like Visuals in Power BI

- Tablix
  - Tables
  - Matrixes
  - Lists
- Charts
- Gauge
- Maps

Sales Territory	Full Name	ID2003	ID2004
Northwest	Pamela O. Anderson-Wolfe	\$900365.58	\$1656492.86
	David R. Campbell	\$1377431.33	\$1930885.56
	Tate A. Morris-Annas		
Total			

Table Report

Sales by Area and Year		North America		2003	2004	Total
		US	CA			
Clothing	Caps	\$9798.76	\$2801.06	\$9909.44	\$3606.39	\$13515.83
	Tights	\$51391.51	\$8233.90	\$59625.41	\$11000.00	\$70625.41
Components	Chains	\$4972.00	\$793.83	\$354		
	Cranksets	\$105118.64	\$18515.99	\$7288		
	Touring Frames	\$767130.33	\$196141.85	\$60345		

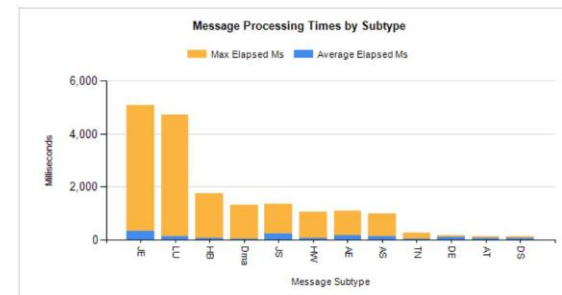
Matrix Report

**Congratulations!**

Michael G Blythe 275

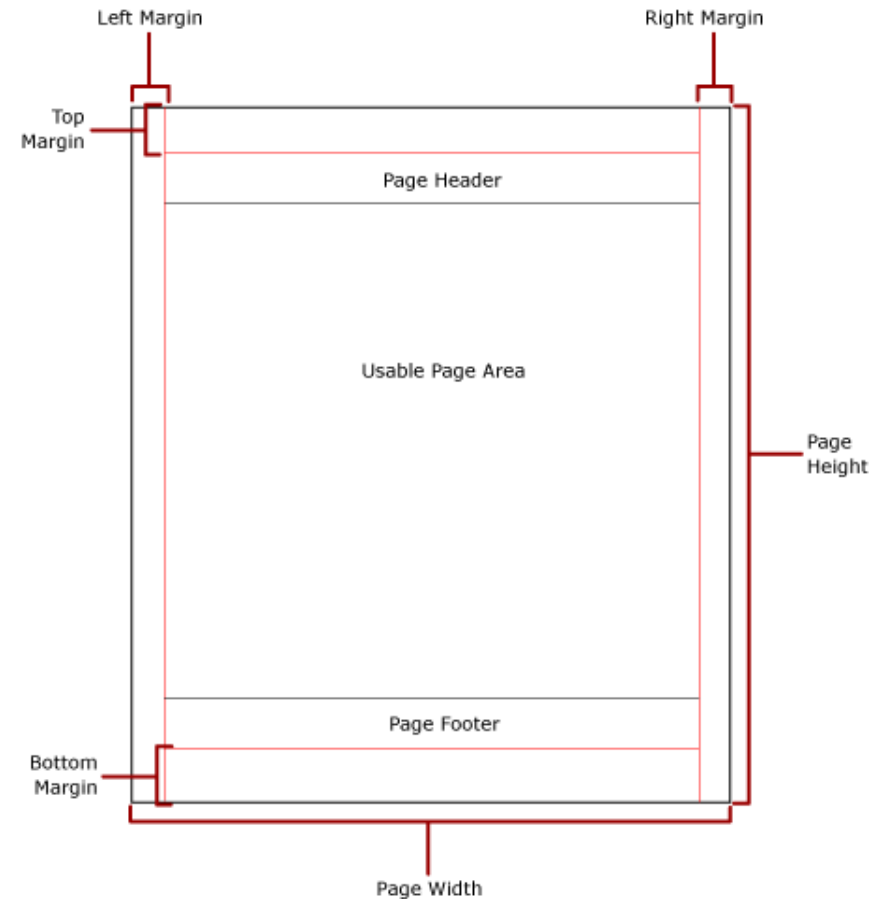
Hello Michael,  
Congratulations on an outstanding year!  
Your sales of \$1951085.83 makes you the TOP Adventure Works sales person in 2008.  
Bob & Craig

List Report



# Report-Level Properties

- Report Layout
  - Interactive size
  - Page size
  - Margins
  - Language
- Body size
- Header and footer



# Item Properties

Complete control over every element in the report

- Fonts and colors
- Date and number formatting
- Naming of report objects
- Expressions!

**Textbox28**

Action	
Action	None
Alignment	
Indent	
Padding	2pt; 2pt; 2pt; 2pt
SpaceAfter	
SpaceBefore	
TextAlign	Default
VerticalAlign	Default
Border	
BorderColor	Black
BorderStyle	None
BorderWidth	1pt
Data Only	
DataElementNam	
DataElementOutg	Auto
DataElementStyle	Auto
Fill	
BackgroundColor	<input type="checkbox"/> No Color
BackgroundImag	
Font	
Color	Black
Font	Segoe UI; 10pt; Defau
LineHeight	

**General**

CanGrow	True
CanShrink	False
Name	Textbox28
ToolTip	
Interactive Sort	
UserSort	
Lists	
ListLevel	0
ListStyle	None
Localization	
Calendar	Default
Direction	Default
LabelLocID	
Language	
Numerallanguag	
NumeralVariant	1
ValueLocID	
WritingMode	Default
Number	
Format	
Other	
Bookmark	
CustomProperties	
DocumentMapLal	
HideDuplicates	

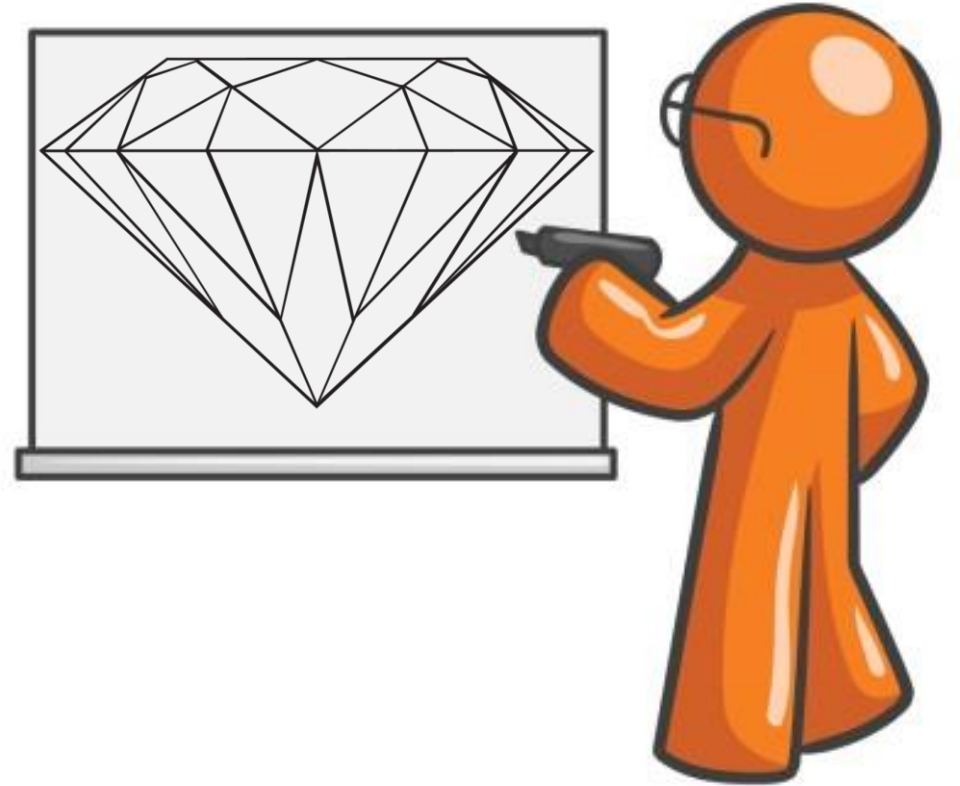


# How to publish and distribute

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# Premium ☹️

- Require P1, P2, P3 or A4, A5, A6
  - Support for A3 is coming
- How to test with out Premium?
  - Azure Portal
  - Create Power BI Embedded
  - Scale to A4 - \$8 per hour
  - Assign capacity to workspace



# Print, Export and Subscriptions

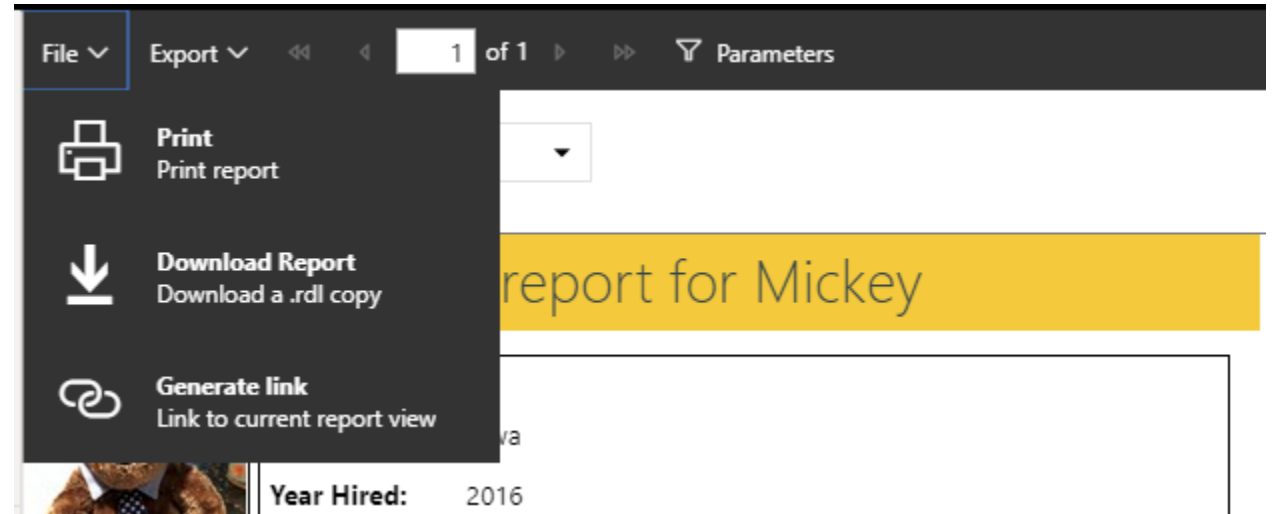
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- Print, print, print
- Export
  - PDF, Word, Excel, PowerPoint, Web
- Subscriptions
  - Hourly, Daily, Weekly



# Bonus: Integration between reports

- Drill trough scenarios
  - Paginated -> Paginated
  - Power BI -> Paginated
- URL parameters
  - Link to report
  - `rp:parameter=value`
  - `rdl:format=PDF`



# The future of Paginated Reports

A large audience is seated in a conference hall, facing a stage with presentation screens. The room is modern with large windows and recessed lighting. The audience is diverse in age and appearance, and many are looking towards the stage. The stage has two large projection screens and a person standing near the center.



# Additional features we can expect to come

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- Data driven subscriptions
- Shared data sources and datasets
- Power Query as data source
- More admin options in portal
- Migration tool
- Support for Pro users?
  - Ideas: <https://ideas.powerbi.com/forums/265200-power-bi-ideas/suggestions/35959420>



# Questions

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