The Power(BI) of Pagination

Austin Elliott





Agenda

- 1. Power BI Report Builder what, who, why, when?
- 2. Pros and the cons of Power BI Report Builder
- 3. Use cases for paginated reporting
- 4. Example build



Power BI Report Builder – what, who, why, when?

Topic One



Power BI Report Builder - what is it?

Powered by Microsoft

- Within the same ecosystem as PowerBI
- Desktop and Online versions
- Licensed with PowerBI if you have PowerBI you have Report Builder

Structured Reports

- Fixed layouts for detailed data representation
- Mix of text, numerical, image data
- Outputs multiple formats, PDF, Word, Excel



Power BI Report Builder - who should use it?

Depending on an organization's licensing with Microsoft...

Data Managers

• Can build, edit, maintain

Project Managers

• Can get the reports they need on command

Clients

• Can get the reports they need on command



Power BI Report Builder – why use it?

- Manually keeping reports consistent and without error is nearly impossible
- Complex data can be time consuming to report on
- Large datasets can be cumbersome
- Integration with typical infrastructure is straightforward
- Powerful customization combined with automation

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Power BI Report Builder – when do I use it?

- A project/manager/client requires hard reports on a repeating schedule
- You can templatize a report which can be utilized by multiple projects on a repeating basis

Paginated Report College



Student Report Card

Student Name:	Abbas Gonzales
Grade and Section:	9B
Teacher Name:	Paginated Report Bear
Date:	3/12/2021

Subject	Grade
Art	65.1%
English	82.9%
French	67.5%
Math	76.4%
PE	88.5%
Science	62.0%
Social Studies	83.8%

Great improvement this	s term!	



Pros and the cons of Power BI Report Builder

Topic Two



Pros of Power BI Report Builder

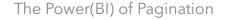
Power Platform Integration Parameterized Reporting Robust Expression Language

Export Capable

Multi-Data-Type Friendly

Precise and Repeatable







Cons of Power BI Report Builder

Can be finicky

True power is locked behind technical know-how

Visually lacking



Use cases for paginated reporting

Topic Three





<u>West-Central</u> Oregon - Lookout and Bedrock Fire

Fire

The Lookout Fire is 24,468 acres with an increase to 45% containment. The Bedrock Fire is 31,590 acres with 90% containment. Latest fire information is available at InciWeb: tinyuri.com/Fire-Information

Smoke

Planned burns for yesterday and today have been postponed. We are going to see the same diurnal pattern we have been experiencing. Winds will be a little lighter today, McKenzie is starting the day with MODERATE and will likely increase to see periods USG as the inversion lifts. The light smoke production and lighter westerly winds will lead to smoke being pushed from the fire toward Sisters. Air quality is likely to be good with brief periods of moderate there. The air quality in Redmond, Bend and Madras will remain good today. The air quality in Derot Lake, Sweet Home, Eugene, and Cottage Grove should remain GOOD. Like yesterday we will likely continue to see GOOD air quality along the Willamette Valley.



9/10 - 9/11

rogram on September 10, 2023 at 06:50 AM PDT

Comment for Today -- Sun, Sep 10 0/00 Sweet Home Air quality will continue to be GOOD in the area Cottage Grove City Shops Air quality will continue to be GOOD in the area Dakridg OOD with potential brief periods of MODERAT Ar quality will be GOOD with potential brief periods of MODERATE Bond Eugene will continue in the area ir quality will continue to be GOOD in the are La Pine e area has decreased the air quality to MODERAT Redmond ir quality will be GOOD with potential brief periods of MODERAT McKenzie Air quality is expected to be MODERATE with brief periods of US

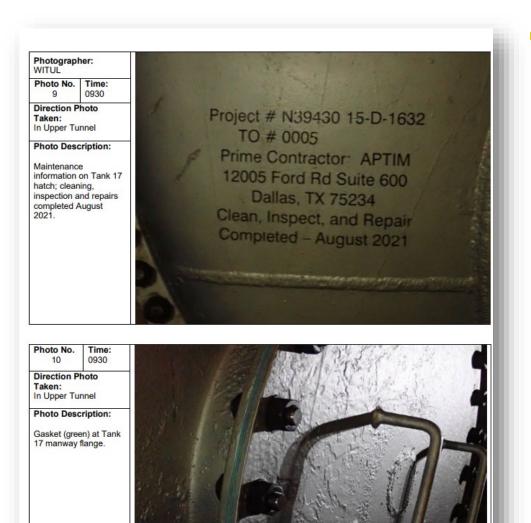
Issued Sep 10, 2023 by V.J. Maisonet (ARA) vmaisonetmontanez@blm.gov

an Qu	ality Index (AQI)	Actions to Protect Yourself			
•	Good	None			
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•	/ery Unhealthy	Everyone should avoid prolonged or h	eavy exertion.		
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	West-Central Orego	icy Widland Fire Air Quality Response Progr n Updates https://outlooks.wildlandfiresn Info www.airnow.gov/air-quality-and-hea	noke.net/outlook/959d2520		

Air Quality Reporting

- Mix of data types
- Complex data with monthly calculations
- Monthly reports must be available for audit by state and federal entities





Equipment Inspections

- Mix of data types
- Large datasets, often with pictures
- Can be many facilities, projects
- Monthly reports must be available for audit by state and federal entities



ICEDM 2023 || 9/12/2023



Feature 30-Part 1 Sediment

Parameter	MCL (NTU)	MDL (NTU)	Result (NTU)
Turbidity		0.1	

Feature 30-Part 2 Microorganisms

Parameter	MCL(1/100ml)*	MDL	Result (1/100ml)
Total Coliforms(including E-Coli)	<1/100ml	na	

Contaminants

Parameter	MCL(mg/L)	MDL(mg/L)	Result (mg/L)
Lead	0.01	0.002	nd
Arsenic	0.01	0.002	nd
Antimony	0.006	0.002	nd
Mercury	0.002	0.0001	nd
Nickel	5	0.01	nd
Copper	0.2	0.01	nd

Feature 32 Organic Contaminants

Parameter	MCL(ug/L)	MDL(ug/L)	Result (ug/L)
Styrene	100	0.38	nd
Benzene (BTEX)	1	0.22	nd
Ethyl benzene	700	0.29	nd
Polychionnated biphenyls(total)	0.5	0.28	nd
Vinyl Chloride	2	0.5	nd
Toulene	1000	0.15	nd
m,p-Xylene (BTEX)	1000	0.44	nd
Tetrachloroethylene (PCE)	1	0.2	nd

Feature 33 - Part 1 Herbicides and Pesticides

Parameter	MCL(ug/L)	MDL(ug/L)	Result (ug/L)
Atrazine	3	0.26	nd
Simazine	-4	0.87	nd
Glyphosate	na	0.5	nd
2,4-Dichlorophenoxyacetic Acid	na	0.5	nd

Feature 33 Part 2-Fertilizers

Parameter	MCL(mg/L)	MDL(mg/L)	Result (mg/L)
Nitrates	10	0.3	nd

Sample Data!

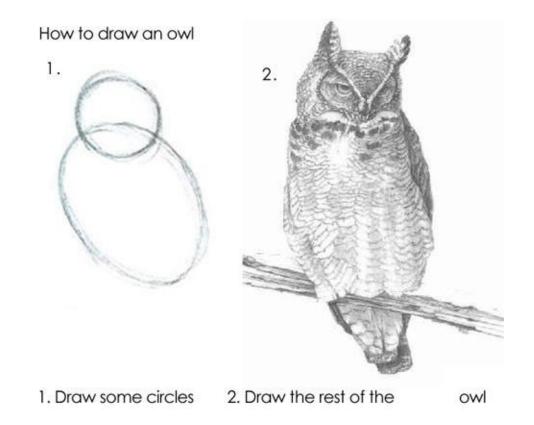
- Ever seen groundwater sampling data in a PDF?
- Large datasets, consistent output format required, mix of data types



Example Build

Topic Four









Comments or questions?





