



# **Creating Accessible Power BI Reports**

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**DCAC\***

**Evaluate me!**

**<https://evals.datagrillen.com>**



We should create accessible reports because we are sharing information. Accessibility is part of inclusive design. When you ignore accessibility, you are actively excluding people. Disabilities are not always visible, and people don't always announce their disabilities. Disabilities can be temporary or permanent. We can't be 100% accessible to 100% of our audience. But that doesn't mean we are excused from trying to be as accessible as we can. Accessibility and usability go hand in hand. Often, the changes we make to our reports will benefit everyone as well.

**Most report designers  
aren't purposefully making  
inaccessible reports. But  
the results are the same  
regardless of intention.**

**Lack of awareness makes  
basic report accessibility  
seem more difficult than it  
really is.**

# Today's discussion

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Why build accessible reports?

How to build accessible reports

How you can build accessible design habits today



**Why**

**accessible**

**reports?**

**Do you incorporate  
accessibility into your  
normal report design  
process?**

## **Common response:**

**“No one in my audience is disabled.”**

**Are you sure?**

**7.9 million** people in  
**Germany** are considered  
**severely disabled.**

**In Germany there is an employment gap of about 35 percentage points between those with disabilities and those without.**

## **Common response:**

**“But that’s not  
the people I  
work with.”**

**How do  
you  
know?**

**30%** of college-  
educated employees  
working full time in  
white-collar jobs have  
some kind of disability.

## **Common response:**

**“But no one has  
ever asked for an  
accommodation.”**

**Why force  
them to?**

**More than 1/3 of  
those with disabilities have  
experienced discrimination  
or negative bias in the  
workplace.**

**39% of employees with disabilities tell their manager**

**24% tell their team**

**21% tell Human Resources**

# Change your mindset

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## Medical

Disability = Condition



## Social

Disability = Societal Barriers



# Web Content Accessibility Guidelines



## Guideline 1.4 – Distinguishable



### 1.4.1 Use of Color



Level A: Color is not used as the only visual means of conveying information...or distinguishing a visual element.

Current Year Sales By Product

Product	CY Sales
Dog Treats	10,250
Dog Food	8,325
Dog Toys	5,336

Current Year Sales By Product

Product	CY Sales	YoY Sales
Dog Treats	10,250	▲
Dog Food	8,325	▲
Dog Toys	5,336	▼

# Example WCAG success criteria



A mechanism is available for identifying specific definitions of words or phrases used in an unusual or restricted way, including idioms and jargon

 [Glossary](#)

## CY Sales By Product

Products	Rev
Trts	10,250
Fd	8,325
Toy	5,336

## Current Year Sales \$ By Product

Product	Sales USD
Dog Treats	10,250
Dog Food	8,325
Dog Toys	5,336

# Why Become More Accessible?

Improve the lives of people with disabilities

Capitalize on a wider audience

Avoid lawsuits and bad press





Why  
accessible  
reports?

**You are doing it  
wrong if you wait  
until someone  
requests an  
accommodation.**

# Accessibility helps everyone

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**Abilities & preferences**

**Environment**

**Temporary conditions**





# **Building accessible reports**

# Universal Design

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The design of products that are **usable** by as many people as reasonably possible **without the need for special adaptation** or specialized design.

# Accessibility in a low-code tool

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Power BI gives you the pieces for accessible reports, but you must put some of them in place



# Three categories of accessibility features



**Accessible  
Reports**

Built-in, no developer effort required

Built-in, requiring configuration

Achievable only by report developer efforts

# Built-in accessibility features

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General keyboard navigation

High contrast colors view

Screen-reader compatibility (JAWS)

Accessible Show Data table

Focus mode



Accessible  
Reports

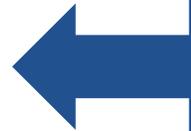
# Demo: Keyboard navigation

# Built-in features requiring configuration

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Alt text



Can use conditional  
formatting

Tab order

Chart titles

Header tooltips



**Accessible  
Reports**

# **Demo: Alt Text**

# DIY accessibility features

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Color contrast

Colorblind-friendly colors

Report themes



**Accessible  
Reports**

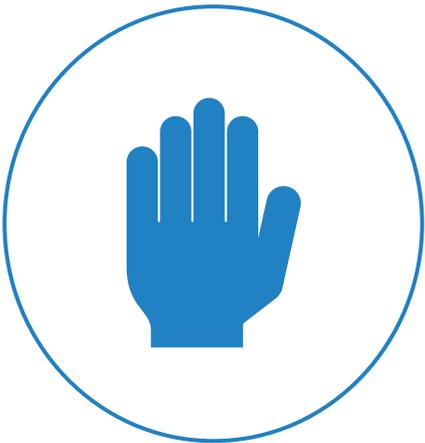
# **Demo: Color contrast check**

# Areas of accessibility

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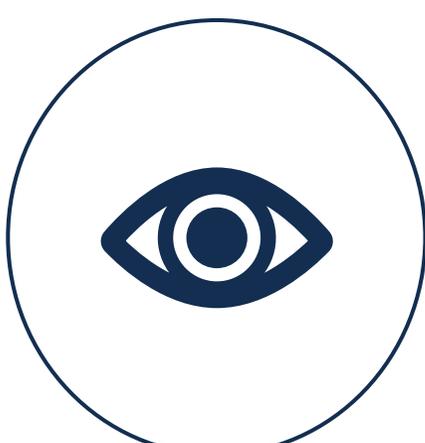
**Hearing**



**Motor**



**Cognitive**



**Visual**

# Testing keyboard accessibility

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General keyboard navigation

Tab order

Show data table



# Testing color combinations



Color contrast

Colour Contrast Analyser

Accessible-Colors.com

Color vision deficiency

Coblis (Color-blindness.com)

Browser add-in

A screenshot of the 'Colour Contrast Analyser (CCA)' application window. The window title is 'Colour Contrast Analyser (CCA)'. The interface is divided into several sections: 'Foreground colour' with a dropdown set to 'RGBa' and a text input field containing 'rgb(104, 172, 166)'; 'Background colour' with a dropdown set to 'HEX' and a text input field containing '#132E51'; 'Sample preview' showing a dark blue box with the text 'example text showing contrast' and a small bar chart icon; and 'WCAG 2.1 results' which shows a 'Contrast ratio' of '5.2:1'. Below this, three criteria are listed: '1.4.3 Contrast (Minimum) (AA)' with two green checkmarks for 'Pass (regular text)' and 'Pass (large text)'; '1.4.6 Contrast (Enhanced) (AAA)' with a red 'X' for 'Fail (regular text)' and a green checkmark for 'Pass (large text)'; and '1.4.11 Non-text Contrast (AA)'.

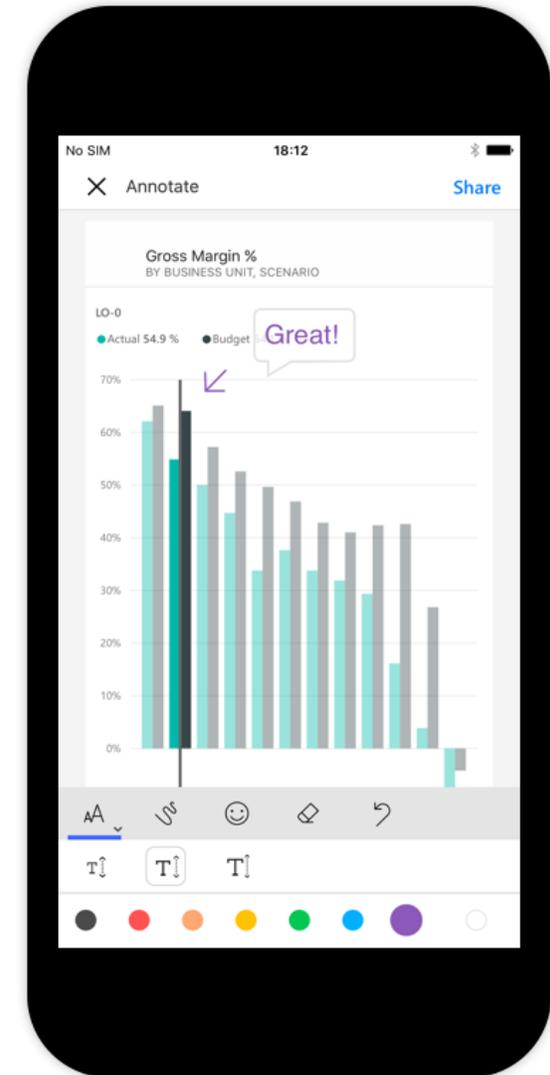
# Testing for low vision



Blur tool

Magnifier

Mobile device with brightness on low





**Accessible  
Reports**

# **Accessibility Checklist**

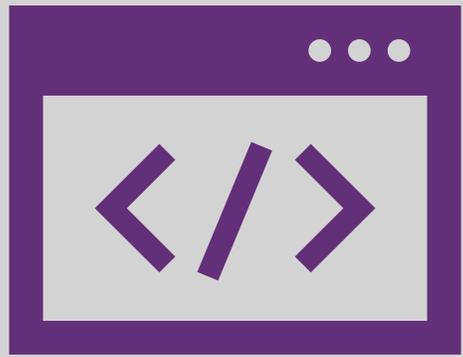
**<https://tinyurl.com/pbiaccesschklist>**



**Accessible  
Reports**

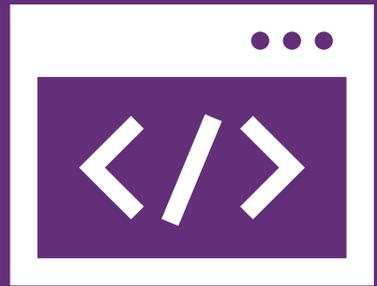
# **Accessibility Makeover Example**

**Accessible**



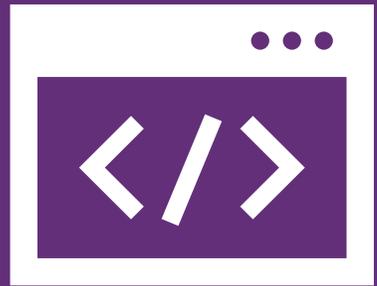
**Design**

**Habits**



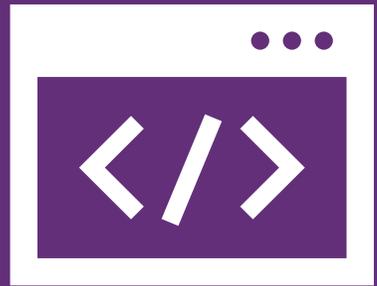
Accessible  
Habits

**Don't assume your audience doesn't have a disability just because you can't see it.**



Accessible  
Habits

**Don't make  
accessibility  
something "other".  
It's part of any design.**



**Accessible  
Habits**

**Don't let perfect be  
the enemy of good.**

# 5 things to start doing today

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1. Ensure charts and text have sufficient color contrast
2. Use descriptive, purposeful chart titles
3. Avoid using color as the only means of conveying information
4. Set tab order on all visuals in each page
5. Remove unnecessary jargon and acronyms from all charts

**Get started  
with PBI  
accessibility  
in WoW 2021**

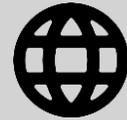
**Wk 14:**

**[https://tinyurl.com/  
WoWA11y](https://tinyurl.com/WoWA11y)**

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