



**DataGrillen**  
Data  
Bratwurst  
Beer



POWER BI MEETS UX DESIGN

# accessible insights

Elena Drakulevska



# Elena Drakulevska

BI Consultant @ **b.telligent**  
Creator of **MoonStory**



 moonstory.design

 @elenadrakul

Power BI  
&  
UX Design



# today in a nutshell

- 1 introduction
- 2 why accessibility matters
- 3 vision
- 4 cognition
- 5 mobility
- 6 what's on your mind?

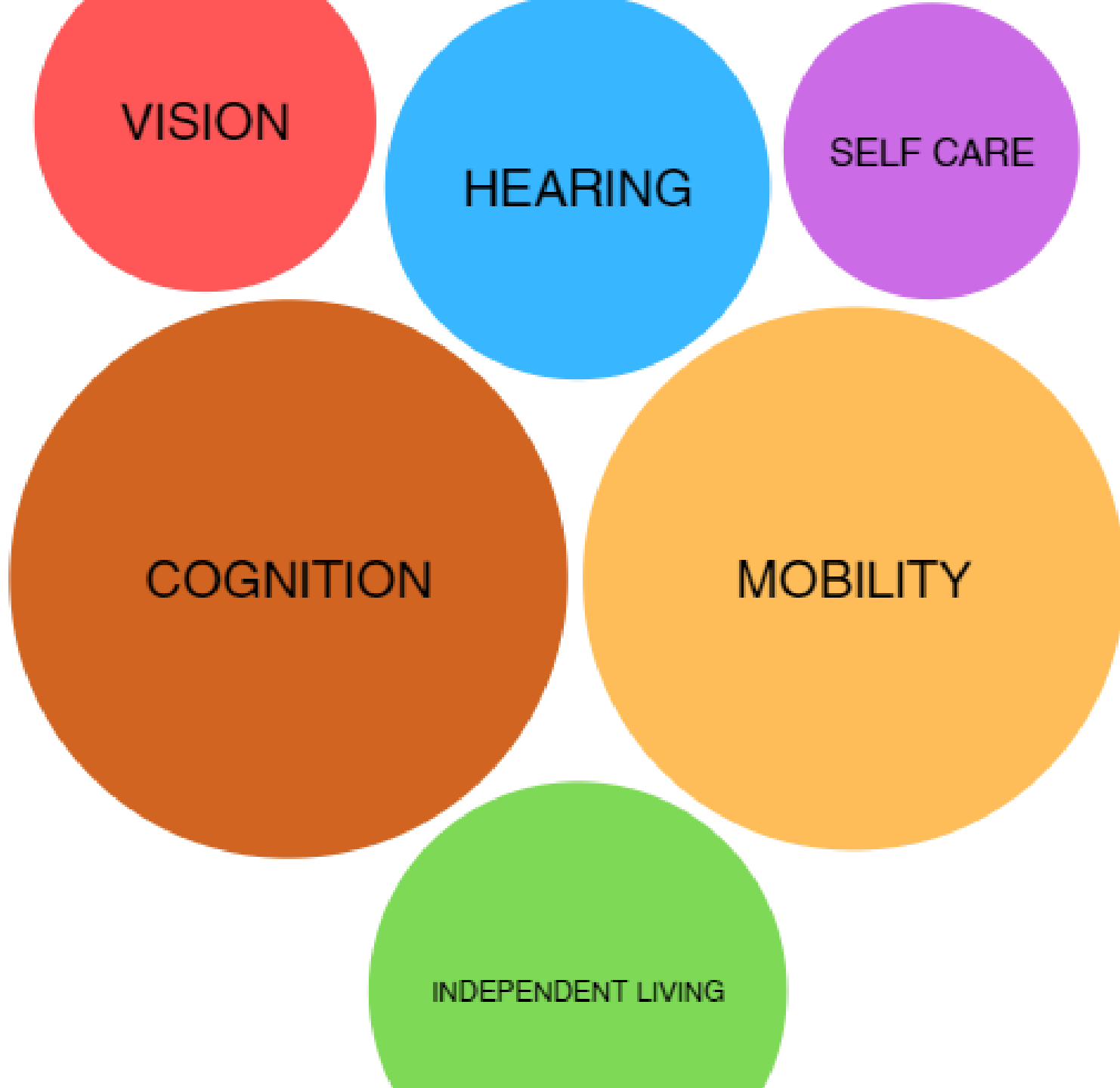


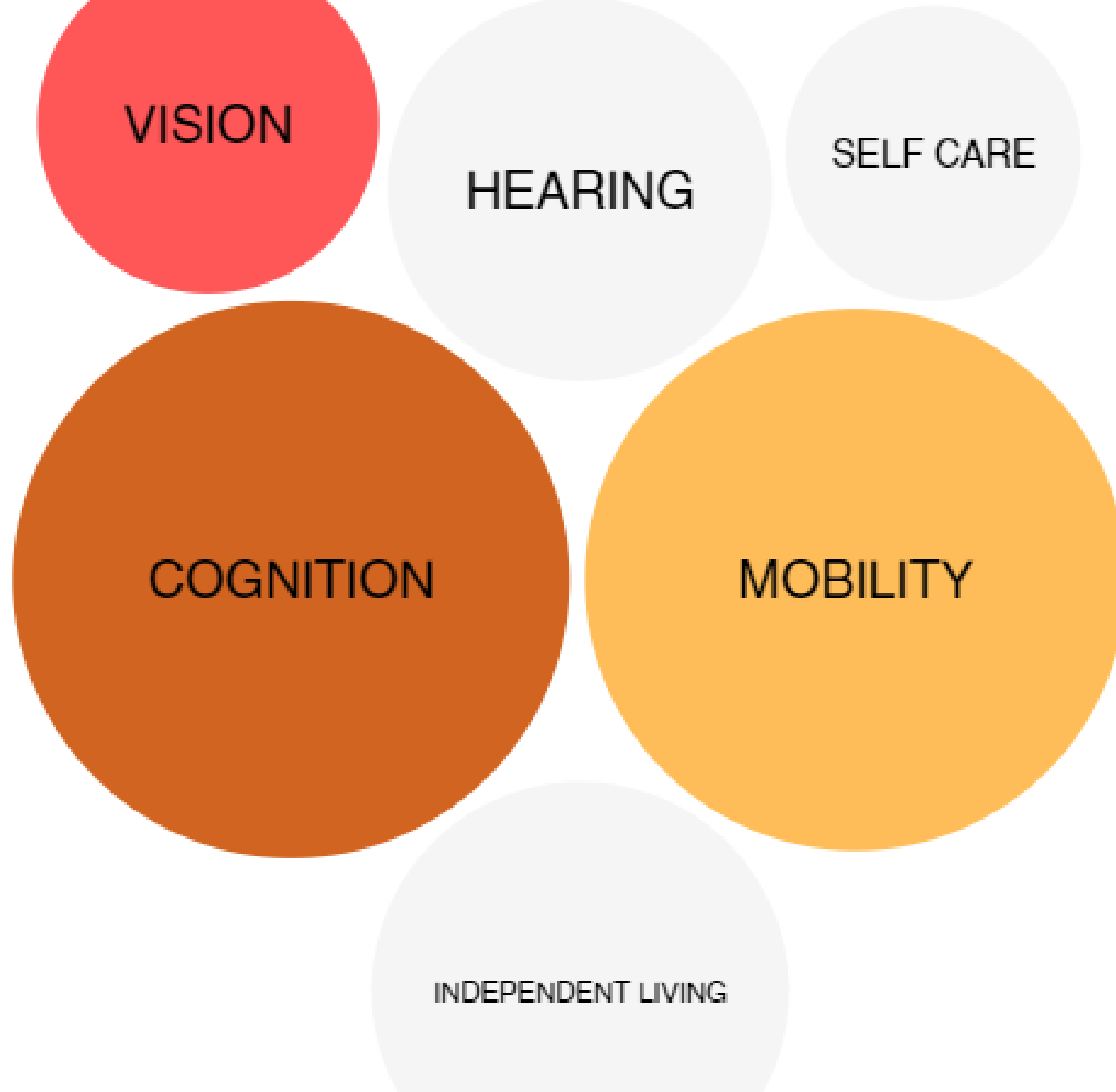
1.300.000.000

**1.3 billion**

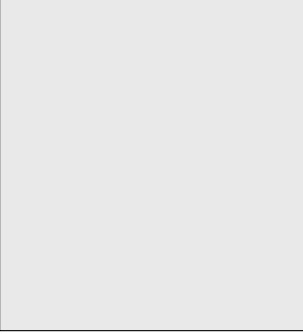
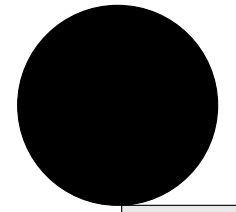
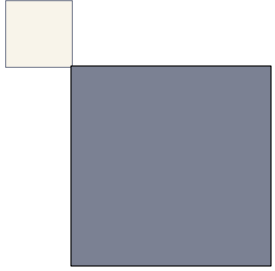












vision



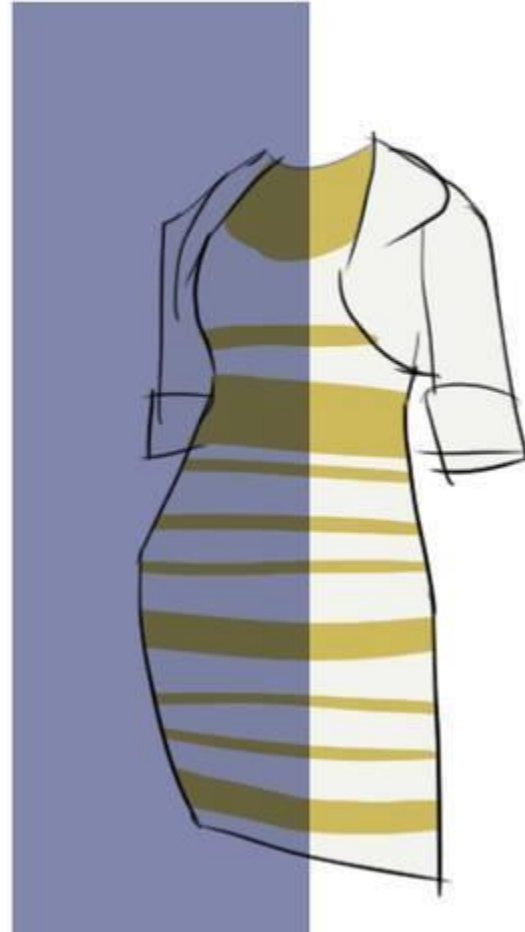




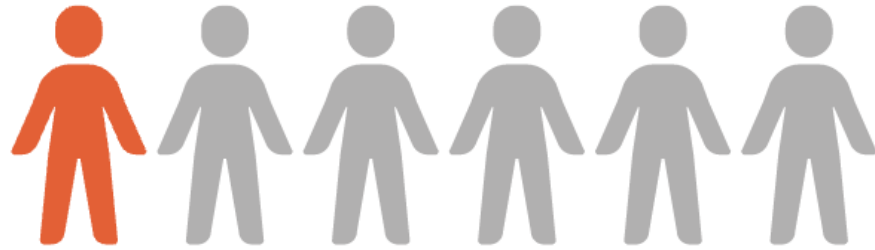
BLACK DRESS,  
YELLOW LIGHT



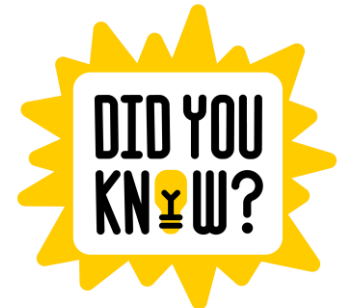
WHITE DRESS,  
BLUE SHADOW



# why accessibility matters?



people in the world live  
with some form of disability

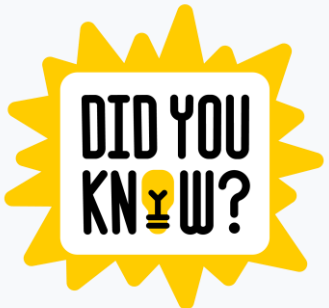




# why accessibility matters?

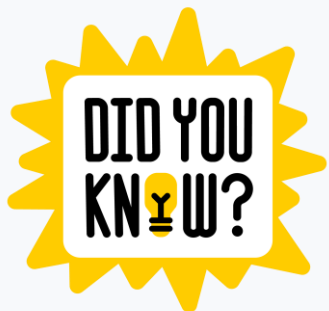
**300 M**

people in the world have  
color vision deficiency

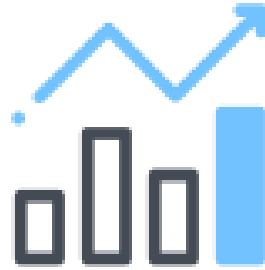


# why accessibility matters?

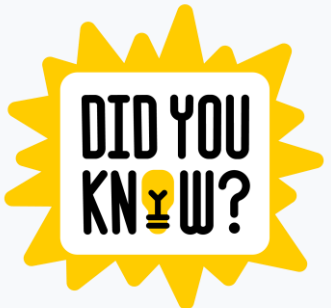
color vision deficiency is not equal



# why accessibility matters?



# of visually impaired is  
expected to **double** by 2050



\*according to WHO estimates



4.5:1

accessibility tips

4.5:1

**4.5 : 1**

**text-to-background  
color contrast ratio**

4.5 : 1

4.5:1

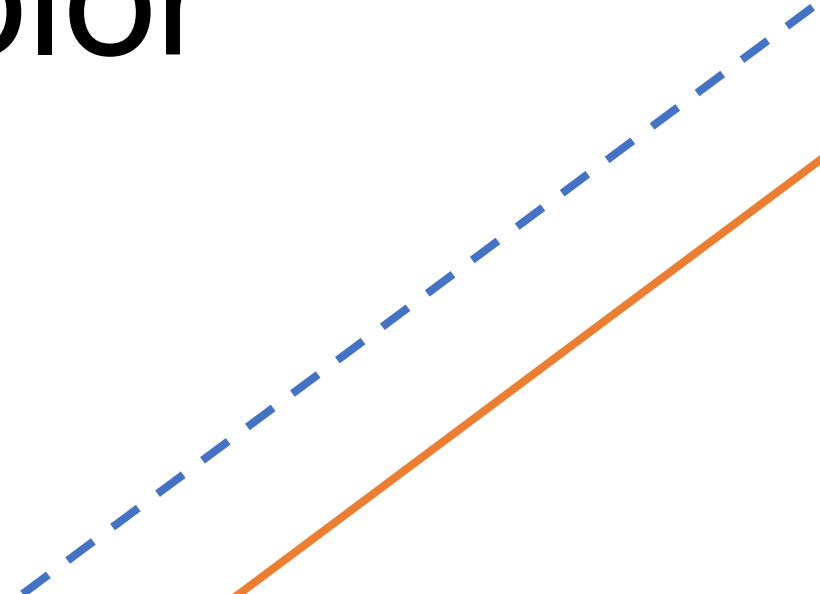
key takeaway #1

**use accessible color  
palettes and check  
your contrast**



accessibility tips

use icons / dashed lines  
in addition to color









information

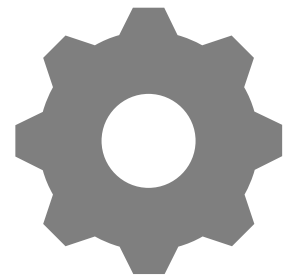
accessibility tips

**use universal icons  
in addition to text**



home


settings





## **Dashboard**

 Project

 Homework

 Class

 Topics

 Group Chat

 Settings

key takeaway #2

**find other ways of  
conveying information**



**WELCOME TO THE  
DARK SIDE**



Total Income

\$1320



Total Expense

\$8980



Total Bonus

\$5400



Income Expense

Last week



Investment

\$16800

+5%



Deposit

\$13500

14%



## My Cards



Balance

\$13.564

2376



## Recent Transactions



Today

KFC

KFC  
12:08 PM

\$16.20



Dribbble  
11:55 AM

\$10.67



Tinder  
10:15 AM

\$12.01



Ikea  
9:32 AM

\$112.43

Yesterday



Netflix  
7:50 PM

\$13.63

# **WELCOME TO THE DARK SIDE**

**SURPRISED WE LIED ABOUT THE COOKIES?**

accessibility tips

avoid dark-mode reports  
unless asked for explicitly

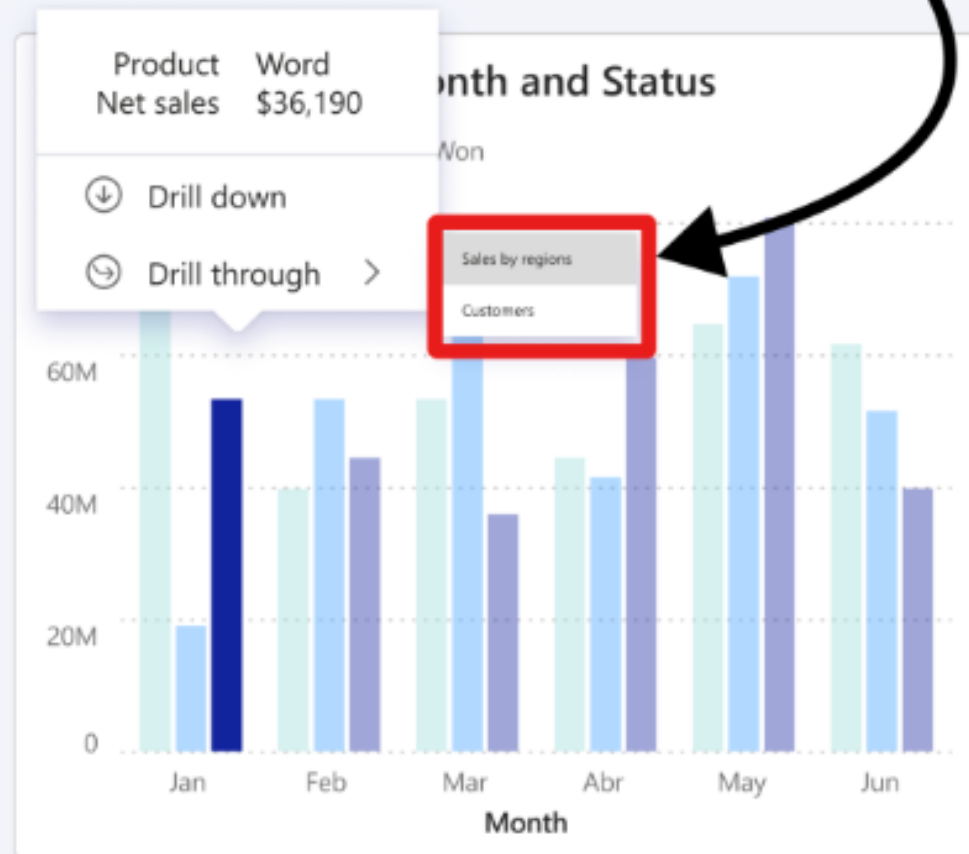
The slide features several decorative colored circles: a large blue circle in the top right, a medium green circle below it, a small purple circle to the right, a medium yellow circle on the left, and a large orange circle in the bottom left corner.

POWER BI

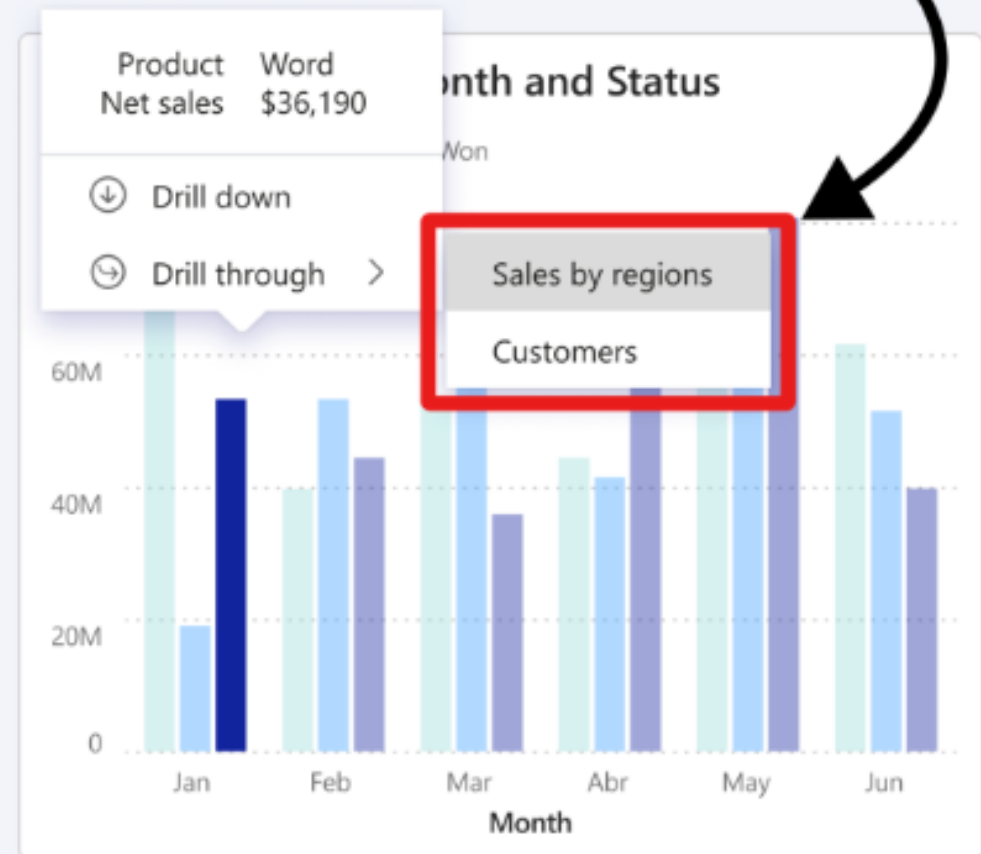
# **screen-reader compatibility & alt text**

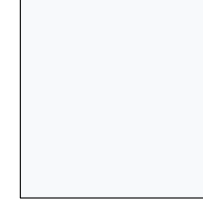
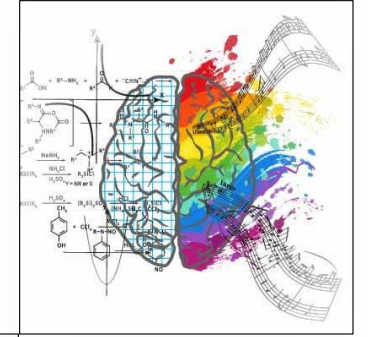
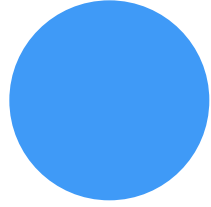


Current



Auto-scaled





# cognition





United States Dollar

\$245,12

🇺🇸

Top Up

Transfer

Request

Transactions

View More

Spotify

02:22 PM • 07 Feb 2023

- \$12,06

Pending

Received from Azhara

02:22 PM • 07 Feb 2023

+\$24,34

Success

Youtube

02:22 PM • 07 Feb 2023

-\$24,34

Success

Scan QR code

Scan this QR code to top tup

https://advance.domai/...

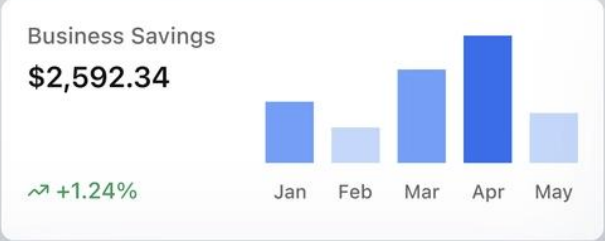
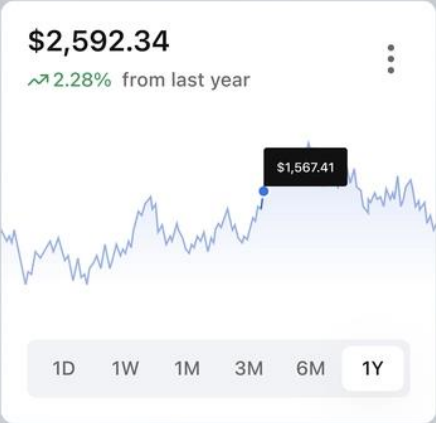
Copy link

Apple Inc.

AAPL

\$234.18

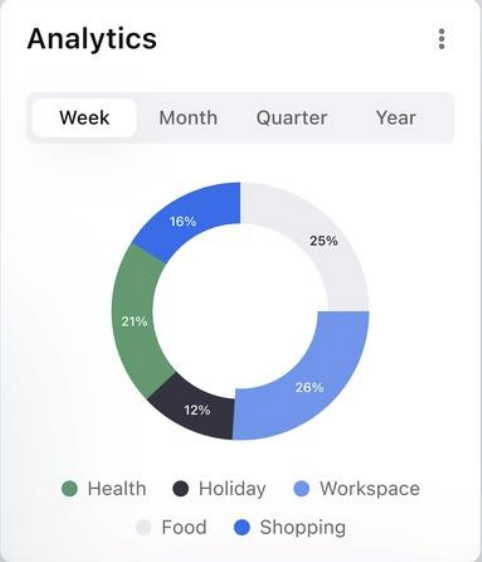
+4.32 (+0.24%)



Upcoming Payments

View All

Name	Date	Amount	
<div><div></div><div>Youtube Ads</div><div>Ads services</div></div>	14 Feb • 11:20 am	\$340.00	<div>Detail</div>
<div><div></div><div>Health Insurance</div><div>Health services</div></div>	14 Feb • 10:34 am	\$252.00	<div>Detail</div>
<div><div></div><div>Figma Pro</div><div>Annual plan</div></div>	13 Feb • 03:30 pm	\$350.00	<div>Detail</div>
<div><div></div><div>Holiday Savings</div><div></div></div>			



Sell EUR

€1 = \$1,08

Balance : €197,6

58,093

EUR

Balance : €197.6

62,38

USD

Sell

Add new card

Card number

1240 0832 0242 1976

VISA

Expiry date

02/24

CVV/CVC

176

Currencies

Add New

Apple Inc.

+1.34%

\$134,27

News

View All







Google Search

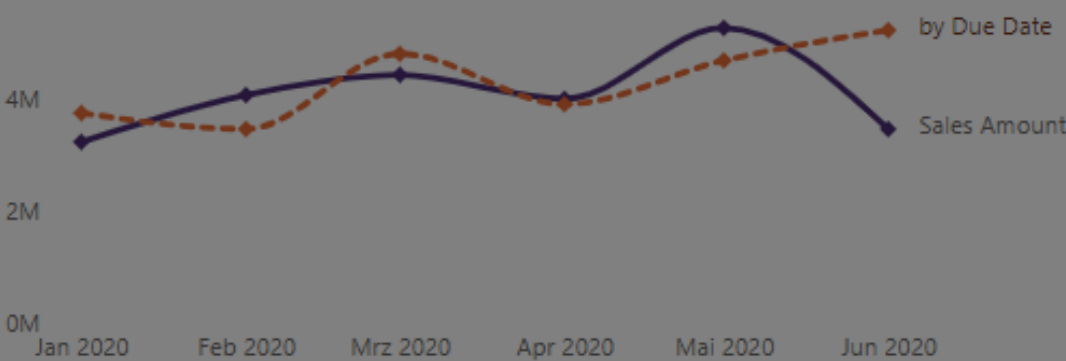
I'm Feeling Lucky

Google offered in: [Deutsch](#)

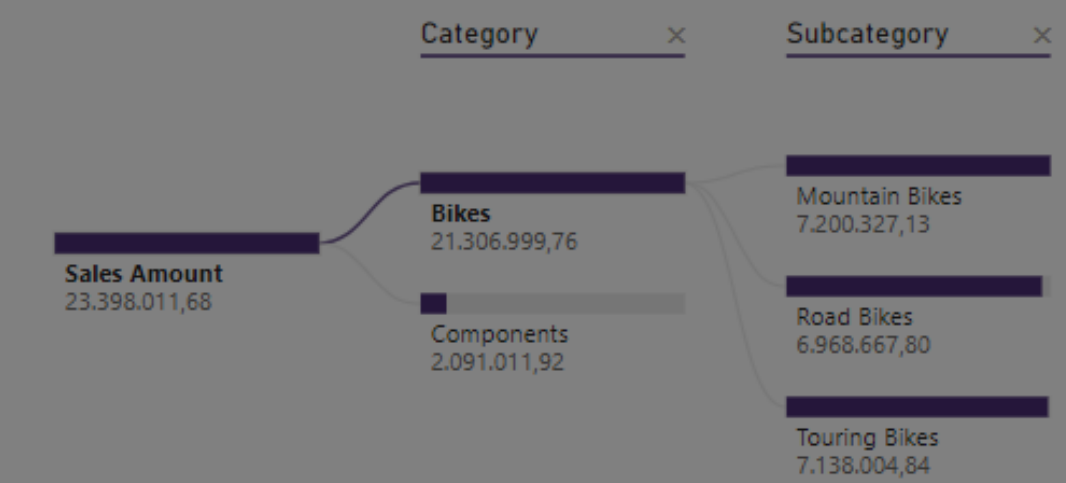
whitespace

Executive Summary | Sales Report

Sales Amount by Order Date



Sales Amount Breakdown



Format

space

Title

On

Spacing

Space below title

0 px

Space below subtitle

10 px

Reset to default

Format

padding

Size and style

Padding

15 px

15 px

15 px

Reset to default



“

perfection is achieved, not when  
there is nothing more to add, but when  
there is nothing left to take away.

ANTOINE DE SAINT-EXUPÉRY



key takeaway #3

**less is more**

φοντο

*fonts*

*fonts*

**FONTs**

FONTs

font

font

Font

**Font**

*avoid fancy fonts*

avoid serif fonts

avoid small fonts



accessibility tips

use **sans serif** fonts

Verdana

Arial

Calibri

Segoe UI

DIN

accessibility tips

## **font size**

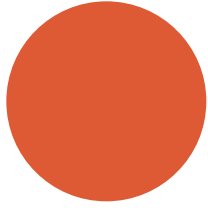
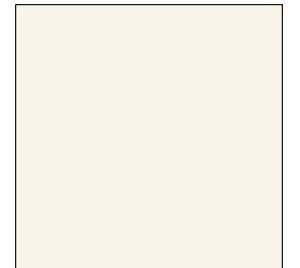
**body text—at least 12pt (16 px)**

**no text smaller than 9pt (12 px)**

key takeaway #4

**not all fonts and sizes  
were made equal**

mobility



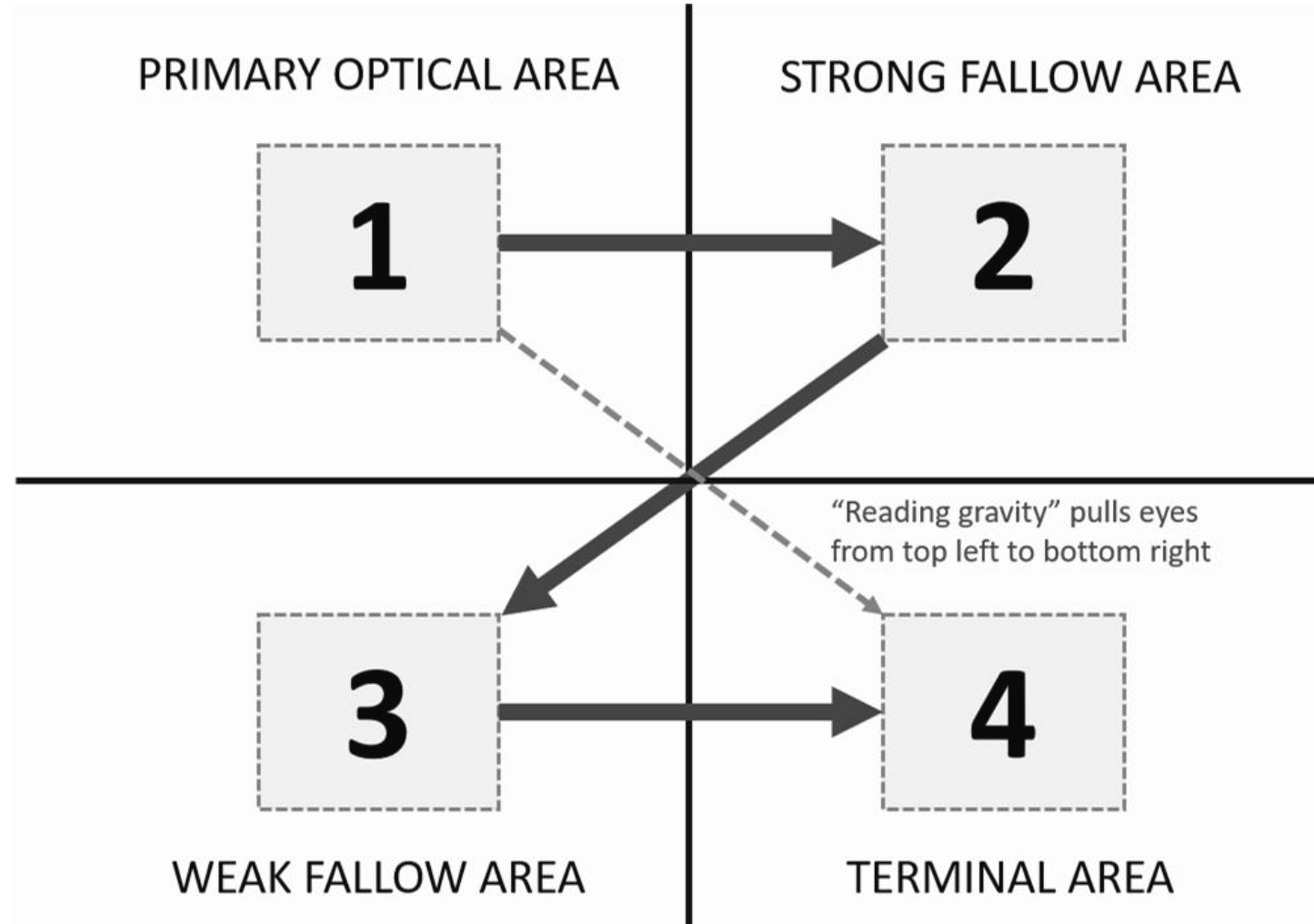
The slide features several decorative colored circles: a large blue circle in the top right, a medium green circle below it, a small purple circle to the right, a medium yellow circle on the left, and a large orange circle in the bottom left.

POWER BI

# keyboard navigation & tab order

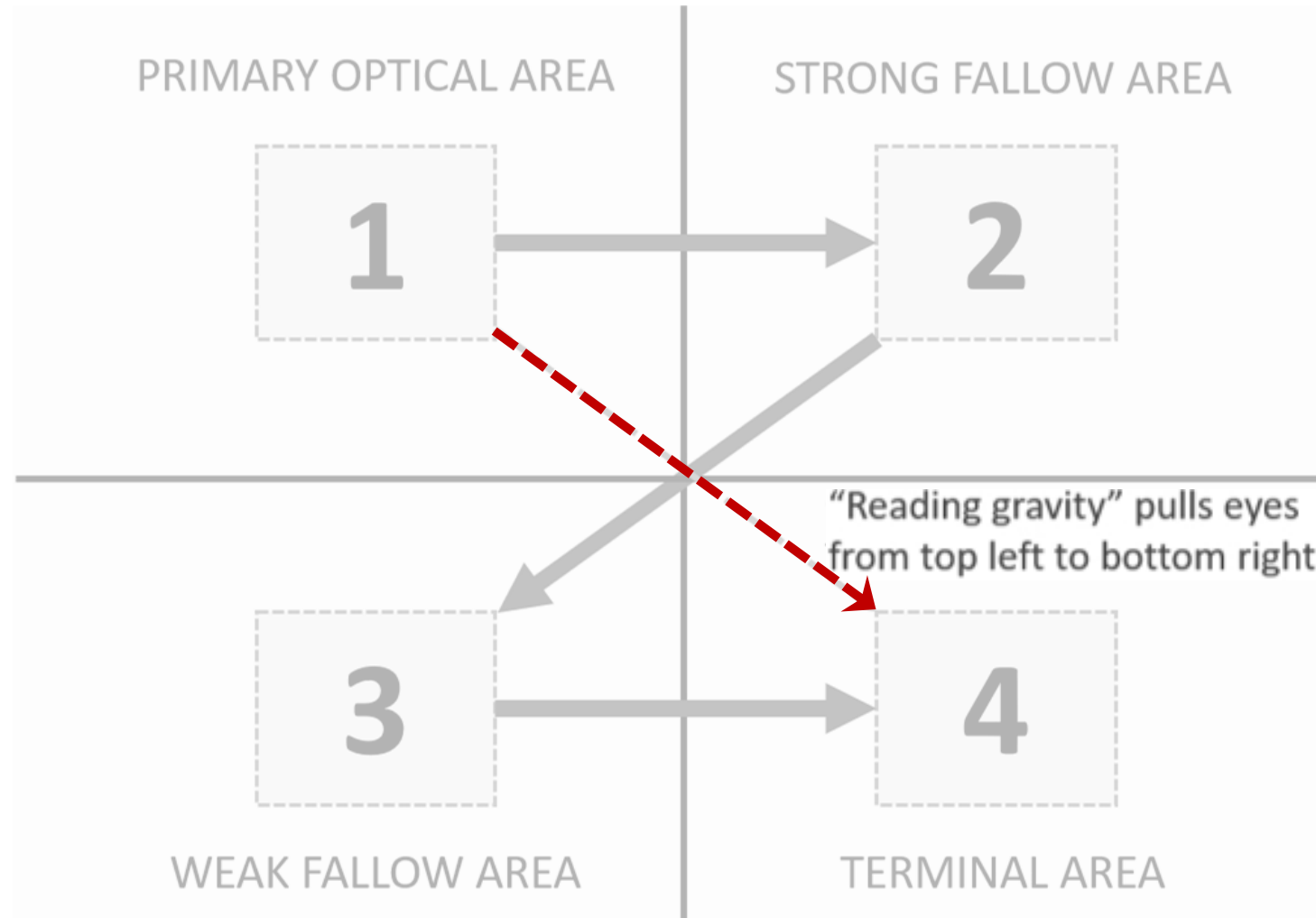
# VISUAL PERCEPTION

## this is how we read



# VISUAL PERCEPTION

## this is how we read





“

the power of the web is in its universality.  
access by everyone regardless of  
disability is an essential aspect.

TIM BERNERS-LEE







“

the power of **dataviz** is in its universality.  
access by everyone regardless of  
ability is an essential aspect.

ELENA DRAKUL





**DataGrillen**

Data  
Bratwurst  
Beer



vielen lieben Dank!



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@elenadrakul