



VISUALIZING DATA

VISUALISATION DES DONNÉES

Dans cette section, nous allons créer des rapports interactifs dynamiques, présenter les meilleures pratiques de visualisation, et explorez des fonctionnalités telles que les favoris, les filtres d'exploration, les paramètres, les info-bulles, etc.

TOPICS WE'LL COVER:

Data Viz Best Practices

Formatting & Filtering

Bookmarks

Report Interactions

User Roles

Parameters

Custom Tooltips

Mobile Layouts

GOALS FOR THIS SECTION:

- Examiner les frameworks et les meilleures pratiques pour visualiser les données et concevoir des rapports et des tableaux de bord efficaces
- Explorez les outils et techniques d'insertion, de formatage et filtrage des visuels dans la vue Rapport Power BI
- Ajoutez de l'interactivité à l'aide d'outils tels que des signets, des slicers, des paramètres, info-bulles et navigation dans les rapports
- Découvrez comment configurer les niveaux de sécurité avec les rôles d'utilisateur.
- Optimiser les rapports pour l'affichage mobile à l'aide de mises en page personnalisées

TROIS QUESTIONS CLÉS

1

Avec quel TYPE DE DONNÉES travaillez-vous ?

- Géospatial ? Des séries chronologiques ? Hiérarchiques ? Financières
-

2

Que souhaitez-vous COMMUNIQUER ?

- Comparaison ? Composition ? Relation ? Distribution ?
-

3

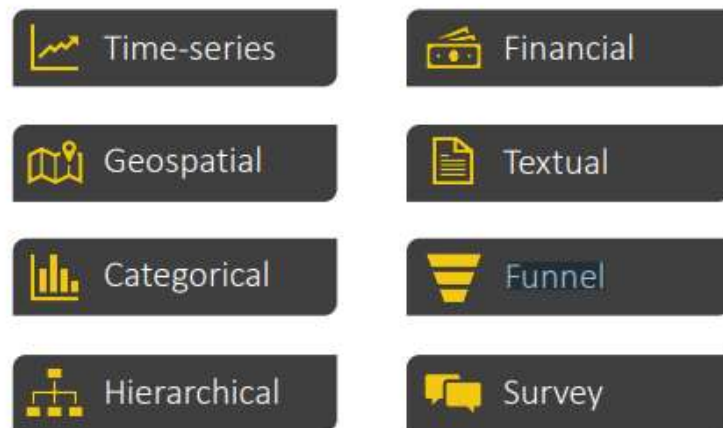
Qui est l'UTILISATEUR FINAL et de quoi a-t-il besoin ?

- Analyste ? Directeur ? Exécutif ? Grand public ?

TROIS QUESTIONS CLÉS

1

Avec quel TYPE DE DONNÉES travaillez-vous ?

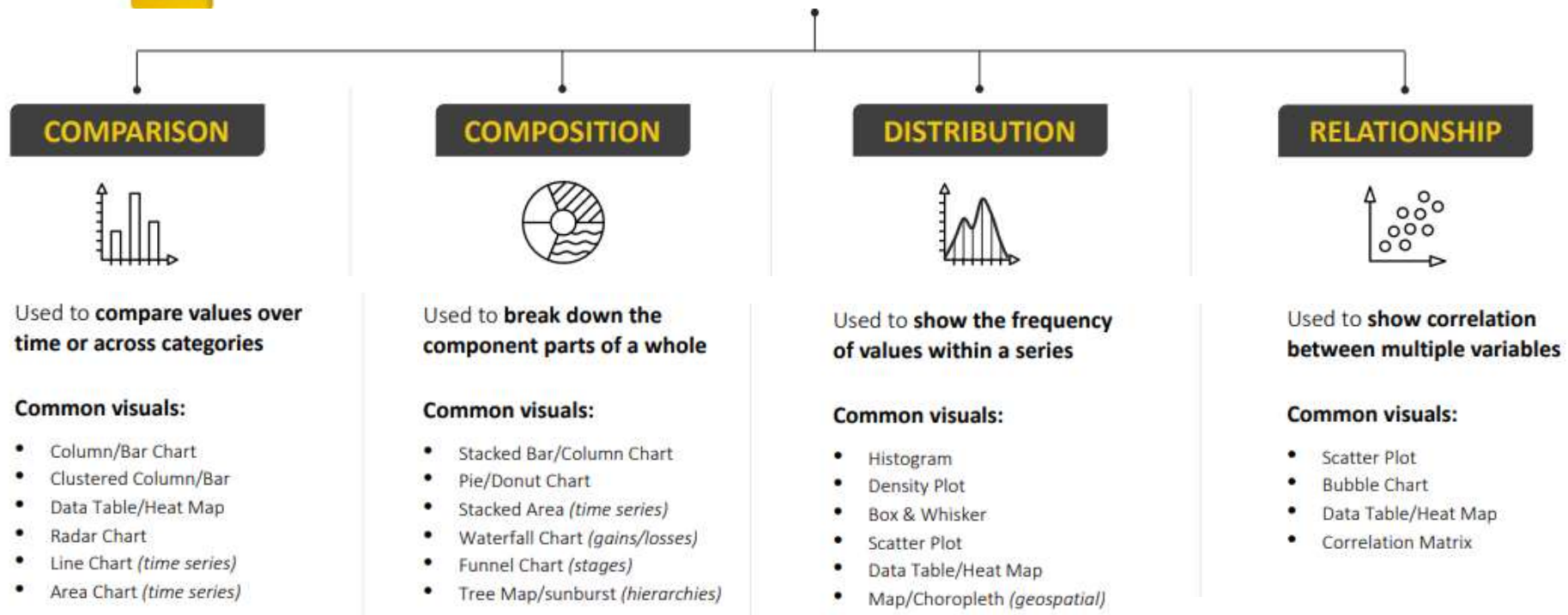


Le type de données avec lequel vous travaillez détermine souvent le type de visuel qui les représentera le mieux ; Par exemple, utiliser des **cartes pour représenter les données géospatiales**, des **graphiques linéaires pour les données de séries chronologiques** ou des **cartes arborescentes pour les données hiérarchiques**

TROIS QUESTIONS CLÉS

2

Que souhaitez-vous COMMUNIQUER ?

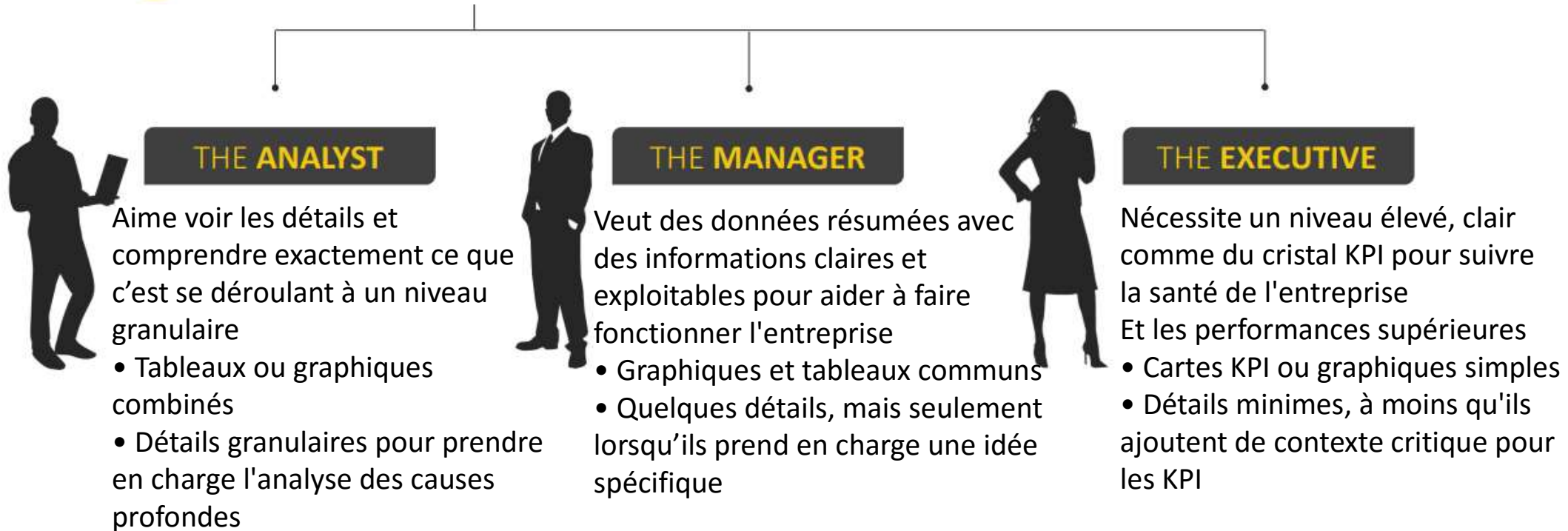


Rester simple! Bien qu'il existe des centaines de graphiques parmi lesquels choisir, les options de base telles que les barres et les colonnes, les lignes les graphiques, les histogrammes et les nuages de points racontent souvent l'histoire la plus simple et la plus claire

TROIS QUESTIONS CLÉS

3

Qui est l'UTILISATEUR FINAL et de quoi a-t-il besoin ?



La manière dont vous visualisez et présentez vos données dépend de qui les consommera ; un analyste voudra peut-être voir des détails granulaires, alors que les managers et les dirigeants préfèrent souvent les principaux KPI et les informations claires basées sur les données

LA VUE RAPPORT DE POWER BI

Insert Menu (Add pages, visuals, buttons, shapes, images, etc.)

Report View

Report Canvas

Panes (Data, Format, Bookmarks, Selection)

Filter Pane (Page-level, report-level, visual-level filters)

Active Windows
Accédez aux paramètres pour activer Window

Report Pages (each tab is a blank report canvas)

View Options (Zoom, fit to page)

Category	Revenue
Accessories	17.0K
Bikes	13.8K
Clothing	1.0K

Product	Orders	Revenue	Return %
Water Bottle - 30 oz.	3,983	\$39,755	1.95%
Patch Kit/8 Patches	2,952	\$13,506	1.61%
Mountain Tire Tube	2,846	\$28,333	1.64%
Road Tire Tube	2,173	\$17,265	1.55%
Sport-100 Helmet, Red	2,099	\$73,444	3.59%
AWC Logo Cap	2,062	\$35,865	1.11%
Sport-100 Helmet, Blue	1,995	\$67,112	3.11%
Fender Set - Mountain	1,973	\$87,041	1.36%
Sport-100 Helmet, Black	1,940	\$65,262	2.68%
Mountain Bottle Cage	1,896	\$38,062	2.02%

Metric	Current Month	Prev Month	% Change
Monthly Revenue	\$1.83M	\$1.77M	+0.31%
Monthly Orders	2,146	2165	-0.00%
Monthly Returns	166	169	+1.70%

Product Type
Tires and Tubes

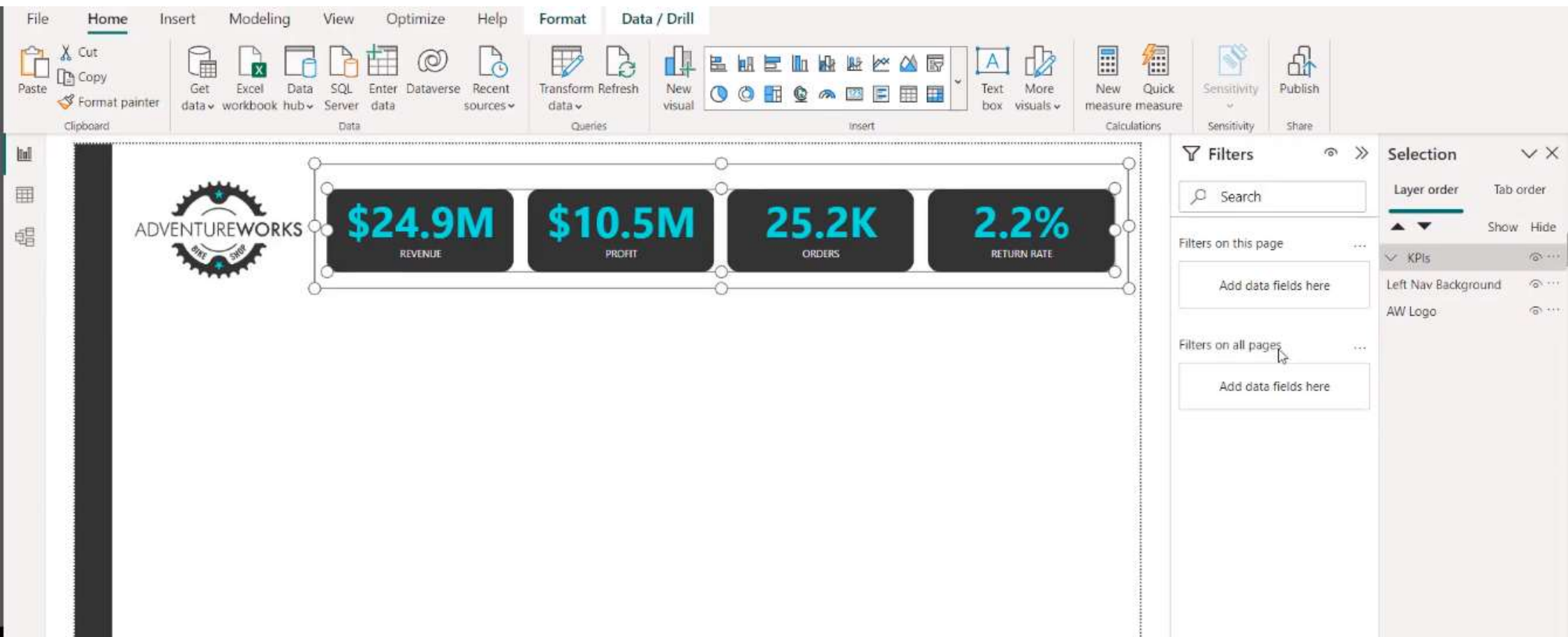
Product Type
Shorts

- Adding Report Pages and Objects

- Naming and grouping objects

- Cards & Multi Row Cards

Extrait 1 du report view



ASSIGNMENT: CARDS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Let's get visual!**

Hey there!

We've kicked off the visualization work for our Power BI dashboard, and I'm hoping you can help.

For now I'd love for you to focus on building out the **Customer Detail** report. Can you start by adding some KPIs to show total customers and revenue per customer?

Key Objectives

1. Insert a **card** in the **Customer Detail** report page to show **Total Customers**, and rename the field "UNIQUE CUSTOMERS"
2. Add a background shape and match the formatting of the cards in the **Exec Dashboard** tab
3. Copy and paste to create a second card showing **Average Revenue per Customer**, and rename the field "REVENUE PER CUSTOMER"

Activer Windows

Accédez aux paramètres pour activer Windows.

SOLUTION: CARDS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Let's get visual!**

Hey there!

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For now I'd love for you to focus on building out the **Customer Detail** report. Can you start by adding some KPIs to show total customers and revenue per customer?

-Vir

Solution Preview

17.4K

UNIQUE CUSTOMERS

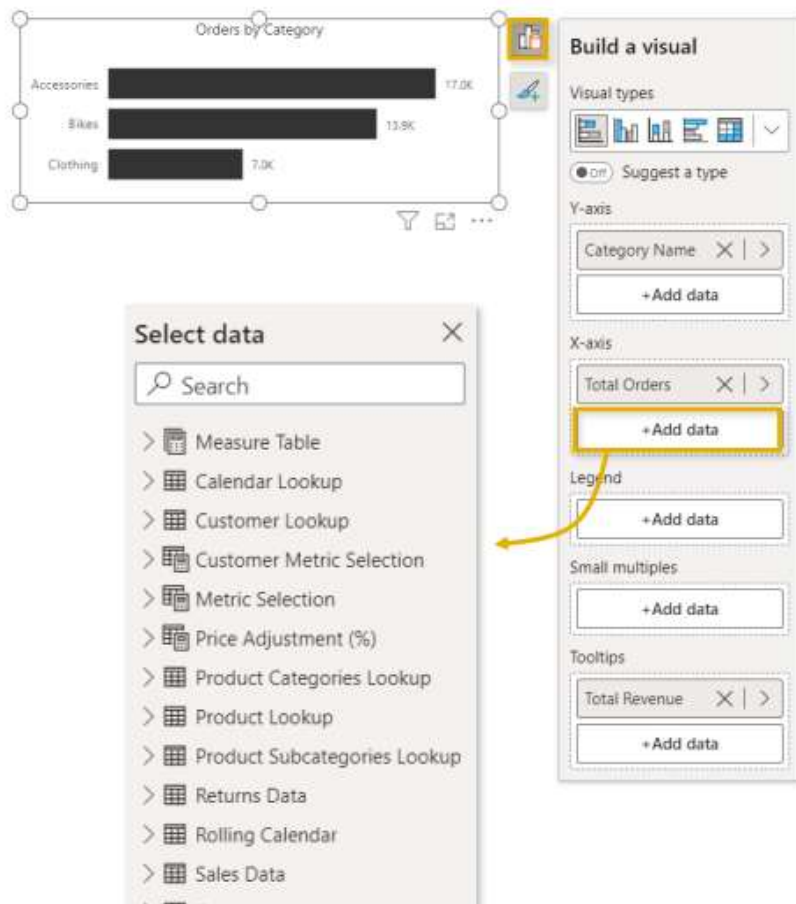
\$1,431

REVENUE PER CUSTOMER

Activer Windows

Accédez aux paramètres pour activer Windows.

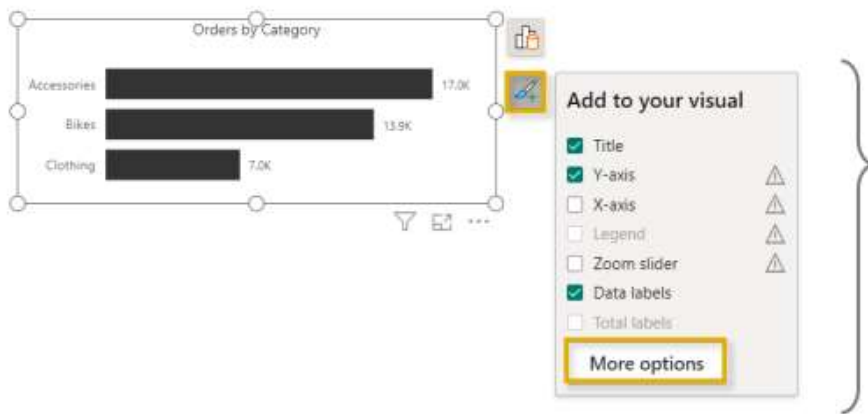
CONSTRUCTION et FORMATAGE DE GRAPHIQUES



Le menu Build vous permet de modifier le type de visuel, de suggérer automatiquement des visuels et d'ajouter des données pour personnaliser les composants du graphique. (axe des x, axe des y, légende, info-bulles, etc.)

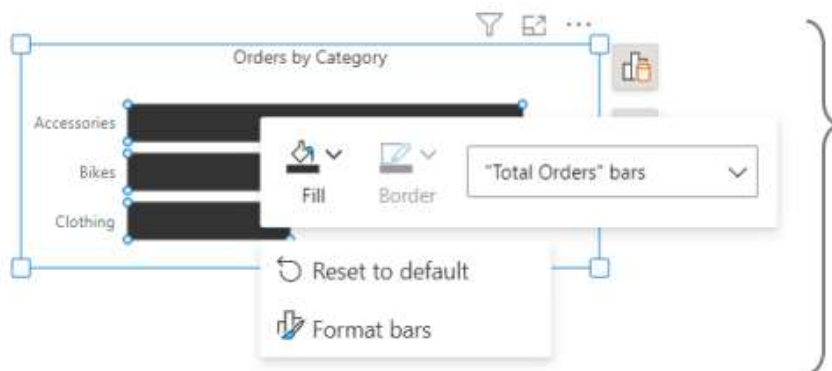
- Il s'agit d'un menu contextuel, vous ne verrez donc que les options qui sont pertinentes pour le visuel sélectionné
- Vous pouvez créer des visuels en insérant un type de graphique spécifique et en ajoutant des données, ou en faisant glisser un champ du volet Données vers le canevas

CONSTRUCTION et FORMATAGE DE GRAPHIQUES



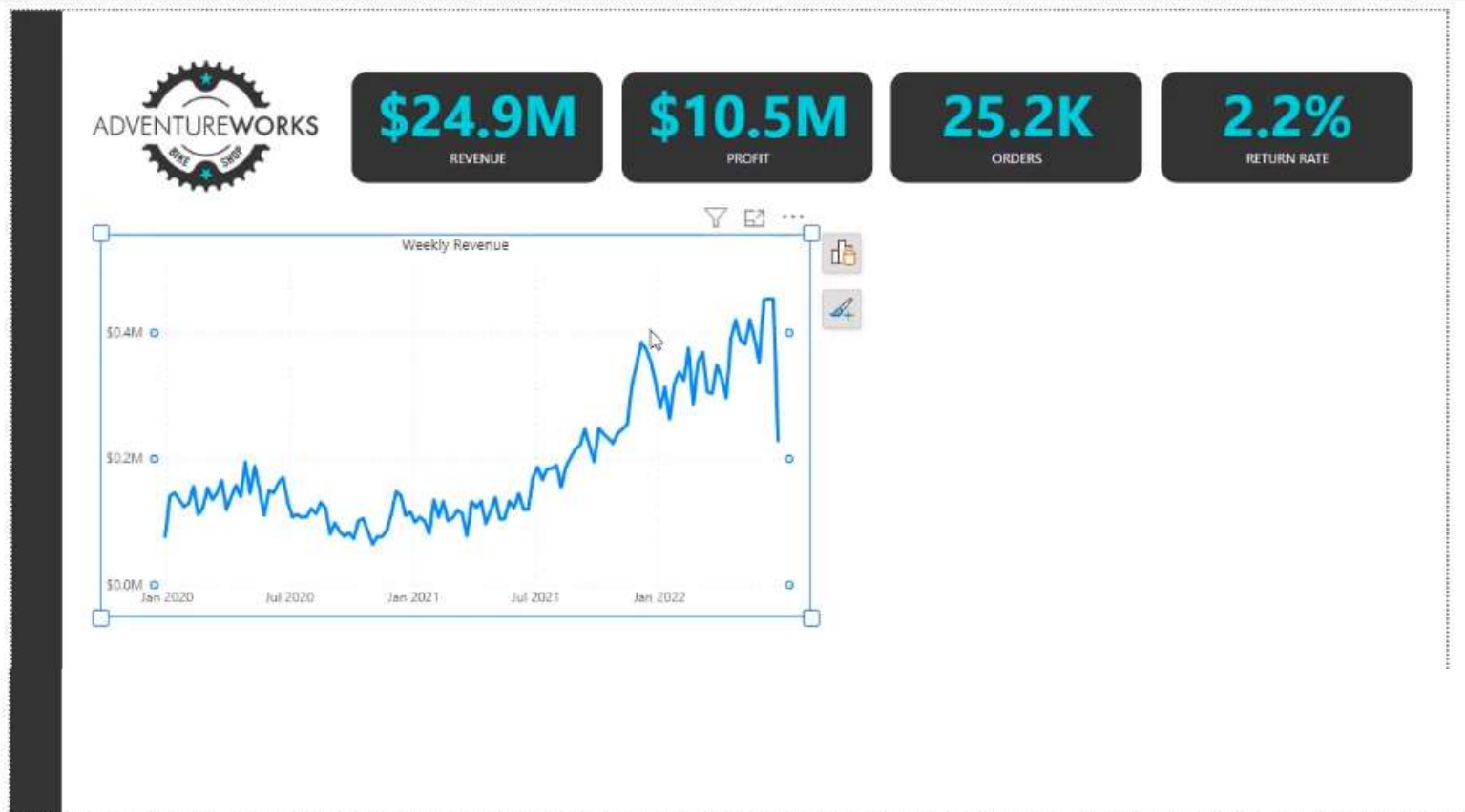
Le menu Format vous permet d'ajouter rapidement des éléments de graphique commun (titre, étiquettes d'axe, étiquettes de données, légendes, etc.) et accéder à des options et propriétés supplémentaires dans le volet Format

- Il s'agit d'un menu contextuel, vous ne verrez donc que les options qui sont pertinents pour le visuel sélectionné



Activez le formatage sur objet en double-cliquant sur le graphique objet (ou clic droit > format), qui vous permet de sélectionner et modifier des éléments individuels du graphique

- La mise en forme sur objet n'est disponible que pour certains visuels (barre, colonne, ligne, zone, combo et dispersion)



Filters

Search

Filters on this visual

Start of Week is (All)

Total Revenue is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Format

Search

Visual Properties

> Size and style

Title On

Title

Text

Weekly Revenue fx

Heading

Heading 3

Font

Segoe UI 10

B I U

Text color

Background color

Horizontal alignment

Text wrap On

> Subtitle On

Line Chart



\$24.9M

REVENUE

\$10.5M

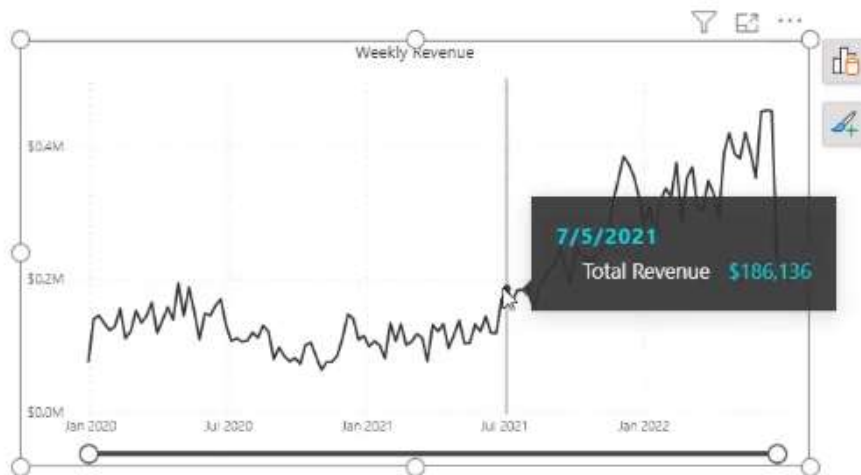
PROFIT

25.2K

ORDERS

2.2%

RETURN RATE



Filters

Search

Filters on this visual

Start of Week is (All)

Total Revenue is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Format

Search

Visual **Properties**

Text

Font: Segoe UI, 10

B I U

Label color: [Color Picker]

Value color: [Color Picker]

Drill text and icon color: [Color Picker]

Background

Color: [Color Picker]

Transparency: 10 %

Reset to default

Active Windows

Trend Lines & Forecast



\$24.9M

REVENUE

\$10.5M

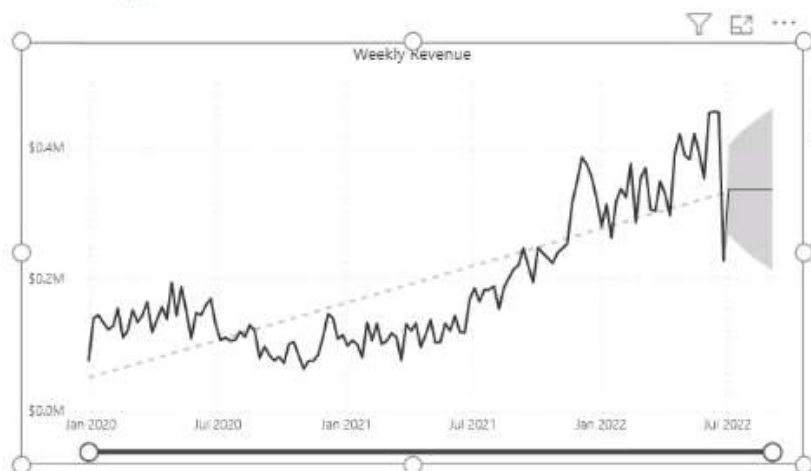
PROFIT

25.2K

ORDERS

2.2%

RETURN RATE



Add to your visual

- ☒ Title
- ☒ X-axis
- ☒ Y-axis
- ☒ Secondary y-axis
- ☐ Legend
- ☒ Zoom slider
- ☐ Markers
- ☐ Data labels
- ☐ Series labels
- ☒ Trend line
- ☒ Forecast
- ☐ Find anomalies

More options

Visual Properties panel for the trend line.

Visual Properties

Search

Filters on this visual

- Start of Week is (All)
- Total Revenue is (All)
- Add data fields here

Filters on this page

- Add data fields here

Filters on all pages

- Add data fields here

Trend line (On)

Color: [Black]

Transparency: 75%

Line style: Dashed

Combine series: On

Use highlight values: On

Reset to default

Reference line

Error bars

ASSIGNMENT: LINE CHARTS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Customer count by week**

Nice work on those cards!

Next up let's add a weekly line chart to show how our customer base is trending over time.

Please add a zoom bar to make it interactive, and format the tooltips to match the line chart in the Exec Dashboard.

Thanks!

Key Objectives

1. Add a **line chart** to the **Customer Detail** report showing **Total Customers** by week
2. Add a **trend line** and a **zoom slider** to the x-axis
3. Enable **tooltips**, and format to match line chart in the **Exec Dashboard** tab

Activer Windows

Accédez aux paramètres pour activer Windows.

SOLUTION: LINE CHARTS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Customer count by week**

Nice work on those cards!

Next up let's add a weekly line chart to show how our customer base is trending over time.

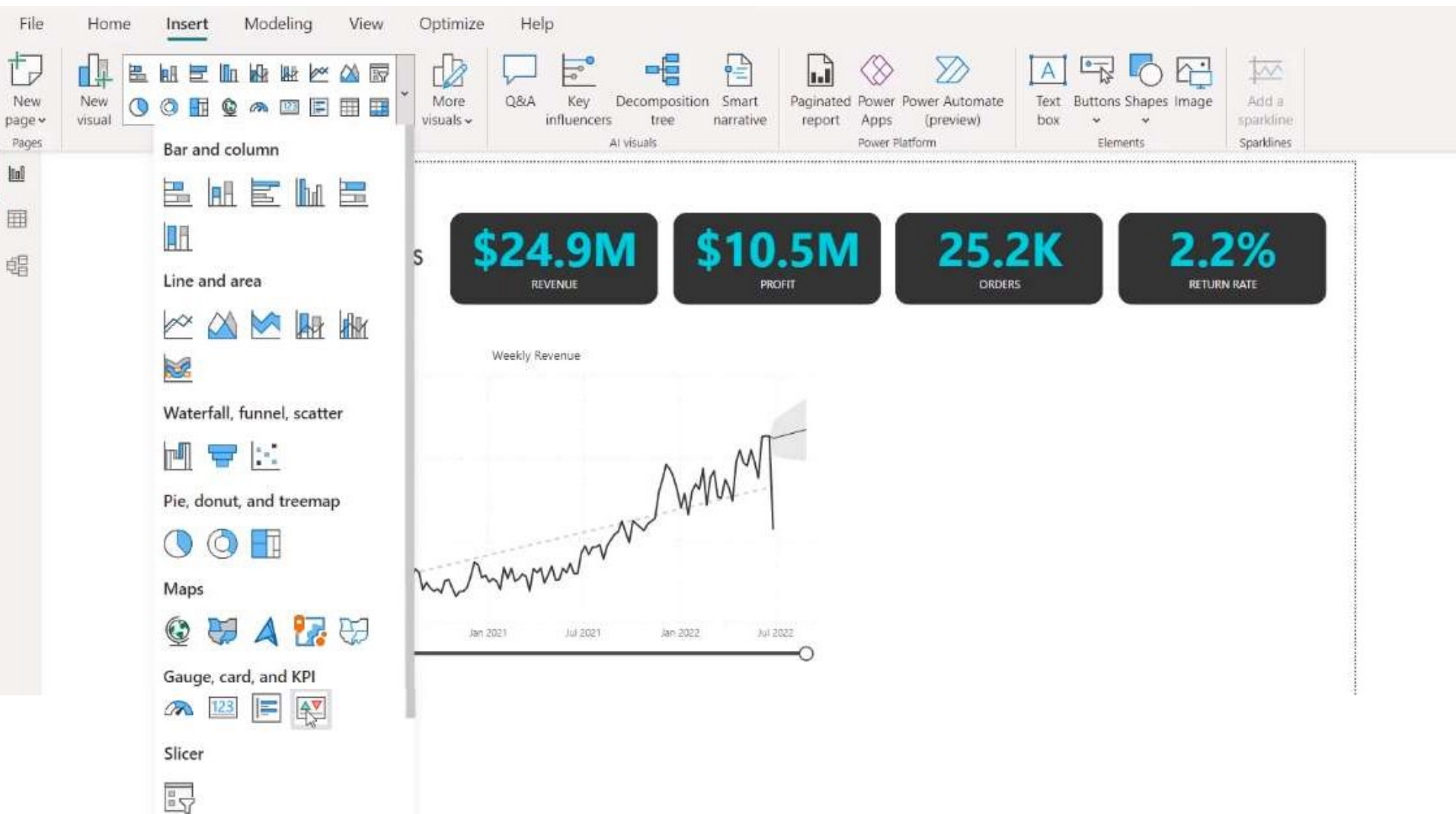
Please add a zoom bar to make it interactive, and format the tooltips to match the line chart in the Exec Dashboard.

Solution Preview



Activer Windows

KPI Cards





\$24.9M

REVENUE

\$10.5M

PROFIT

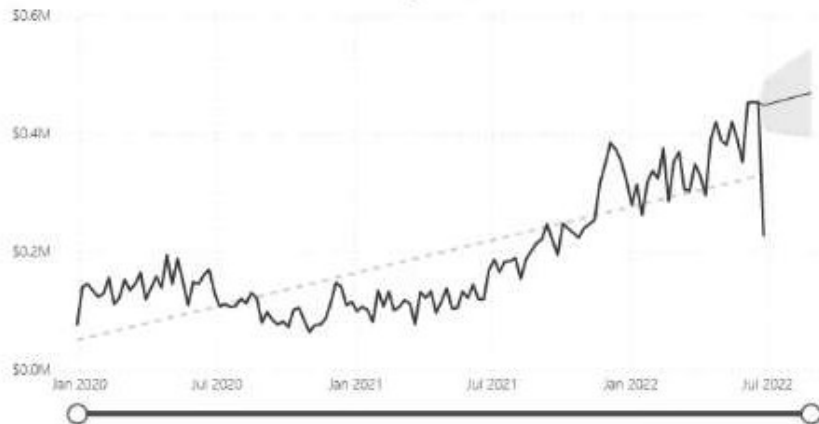
25.2K

ORDERS

2.2%

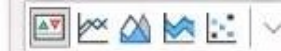
RETURN RATE

Weekly Revenue



Build a visual

Visual types



☐ Off Suggest a type

Value

Total Revenue X | >

Trend axis

Start of Month X | >

Target

Previous Mont... X | >

+ Add data

Format

Search

Visual Properties

> Size and style

Title

On

Title

Text

Total Revenue and P fx

Heading

Heading 3

Font

DIN 14

B *I* U

Text color

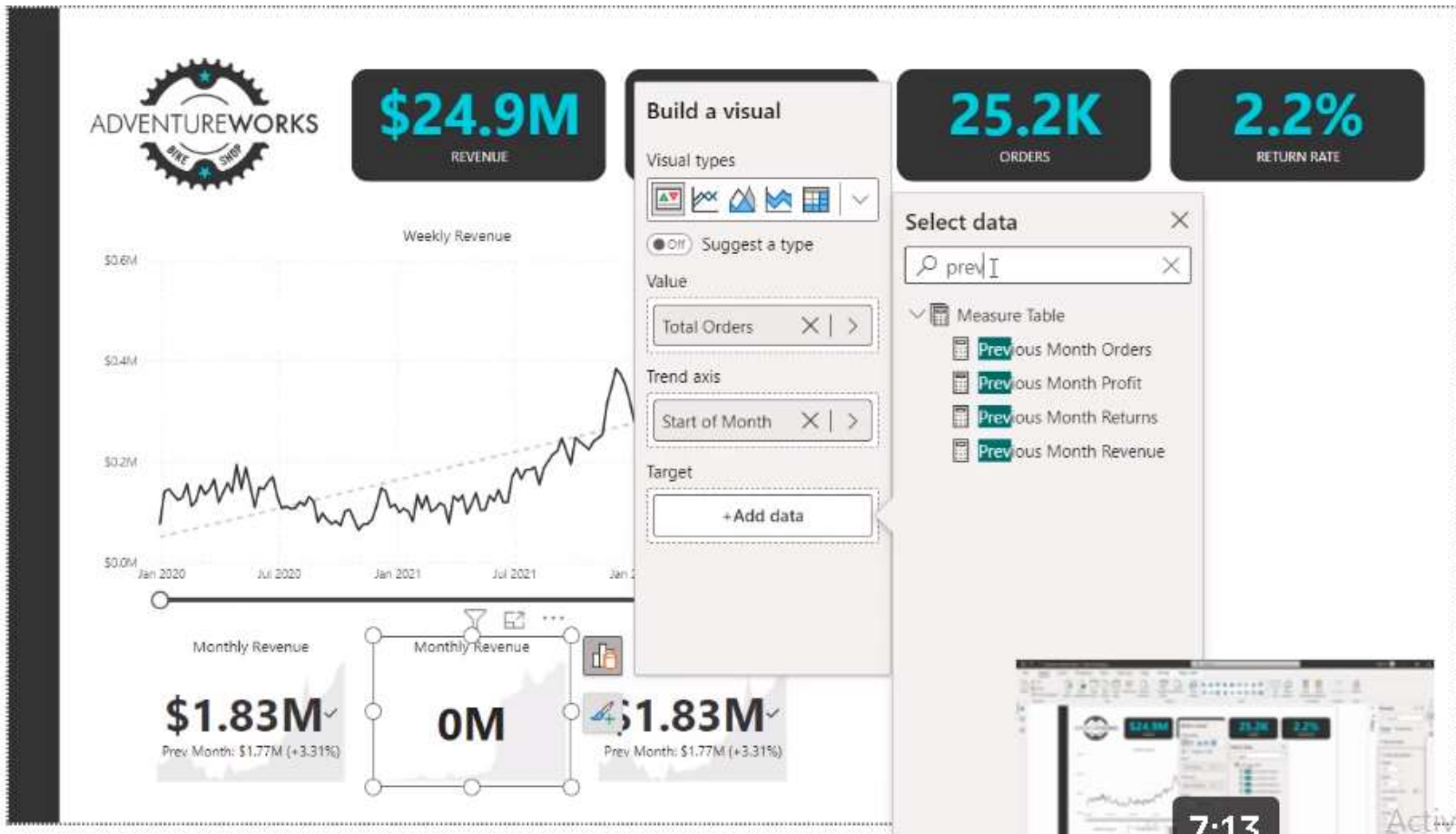
fx

Background color

fx

Horizontal alignment

Left Center Right



The screenshot shows the 'Format' pane in Power BI, which is used to customize the appearance of a visual. It has a search bar and two main tabs: 'Visual' and 'Properties'. The 'Visual' tab is currently selected. Under the 'Size and style' section, the 'Size and position' subsection is expanded, showing settings for Height (133), Width (175), Lock aspect ratio (Off), Horizontal (321), and Vertical (555). Other sections like 'Padding', 'Background' (On), and 'Visual border' (Off) are also visible.

Format

Search

Visual Properties

Size and style

Size and position

Height: 133

Width: 175

Lock aspect ratio: Off

Horizontal: 321

Vertical: 555

Padding

Background: On

Visual border: Off



\$24.9M
REVENUE

\$10.5M
PROFIT

2.2%
RETURN RATE

Build a visual

Visual types



☒ Off Suggest a type

Value

Total Returns X | >

Trend axis

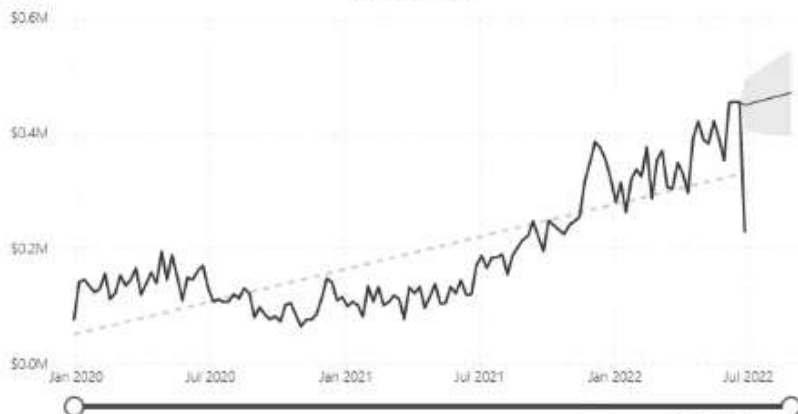
Start of Month X | >

Target

Previous Mont... X | >

+ Add data

Weekly Revenue



Monthly Revenue

\$1.83M ✓
Prev Month: \$1.77M (+3.31%)

Monthly Orders

2,146 ↓
Prev Month: 2165 (-0.88%)

Monthly Returns

166 ✓
Prev Month: 169 (+1.78%)

Format

Visual Properties

Size and style

Title On

Callout value

Icons On

Trend axis On

Direction Low is good

Good Color fx

Neutral Color fx

Bad Color fx

Transparency



FILTERING OPTIONS

Filters 🔍 >>

Search

Filters on this visual ...

Sum of Order Quantity is (All)

Add data fields here

Filters on this page ...

Add data fields here

Filters on all pages ...

Add data fields here

There are **3 types of filters** accessible from the **Filters** pane*:

1. **Visual-level** filters apply to specific visuals
2. **Page-level** filters apply to all visuals on the report page
3. **Report-level** filters apply to all visuals across all report pages

**Drillthrough filters can be configured in the page formatting pane – more on that later!*

Filter type ⓘ

Basic filtering

Search

☒ Select all

☒ Accessories 1

☒ Bikes 1

☒ Clothing 1

☐ Components 1

Basic Options

Filter type ⓘ

Top N

Show items

Top 2

By value

Total Orders

Apply filter

Top N Options

Show items when the value

is greater than

is less than

is less than or equal to

is greater than

is greater than or equal to

is

is not

Advanced (Values)

Filter type ⓘ

Advanced filtering

Show items when the value

contains

contains

does not contain

starts with

does not start with

is

Advanced (Text)

Filters can be configured using basic **selections**, **logical operators**, or **Top N** conditions

Basic Filtering options



Filters

Search

Filters on this visual

CategoryName
is Accessories

Filter type
Basic filtering

Search

☒ Select all

☒ Accessories 1

☐ Bikes 1

☐ Clothing 1

☐ Components 1

☐ Require single selection

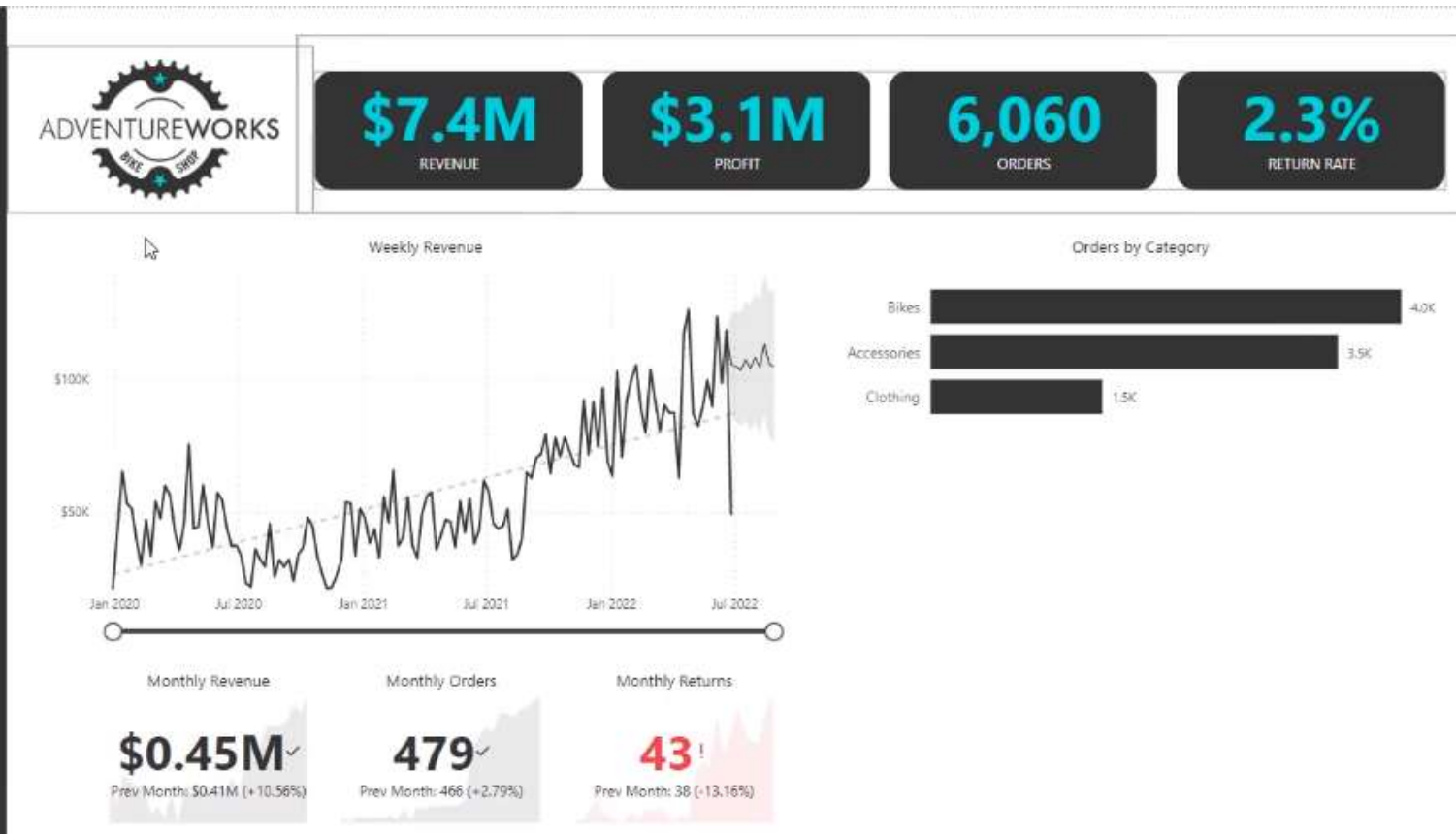
Total Orders
is (All)

Add data fields here

Filters on this page

Active Windows

Basic Filtering options



Filters

Search

Filters on this page

Country is Australia

Filter type: Basic filtering

Search

- ☒ Select all
- ☒ Australia 1
- ☐ Canada 1
- ☐ France 1
- ☐ Germany 1
- ☐ United Kingdom 1
- ☐ United States 5

☐ Require single selection

Add data fields here

Filters on all pages

Add data fields here

Data

Search country

- ☒ Territory Lookup
 - ☒ Country
- ☒ Territory Hierarchy
 - ☒ Country

ASSIGNMENT: DONUT CHARTS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Customer demographics**

Good morning!

Just got a note from Ethan to see if we can build some demographic info into the customer report.

Let's add a couple donut charts to show the composition of customers by income level and occupation. We'll want to limit to just a few segments (maybe 3?) and do some formatting to match the rest of the dashboard.

Thanks, you rock!

Key Objectives

1. Add a **donut chart** to the **Customer Detail** report showing **Total Orders** by **Income Level**
2. Add a **chart title**, turn off the **legend**, and update the **data labels** to show the category and value (font size 8, 1 decimal place)
3. Update the colors of the slices to match the screenshot in the solution preview
4. Add a **visual-level filter** to exclude customers with a "Very High" income level
5. Copy the chart to show **Total Orders** by **Occupation**, and add a **visual-level filter** to display the three occupations with the most orders (*bonus points if you use a Top N filter!*)

SOLUTION: DONUT CHARTS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Customer demographics**

Good morning!

Just got a note from Ethan to see if we can build some demographic info into the customer report.

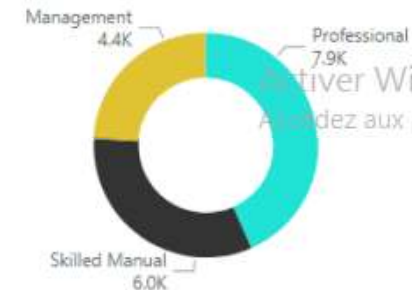
Let's add a couple donut charts to show the composition of customers by income level and occupation. We'll want to limit to just a few segments (maybe 3?) and do some formatting to match the rest of the dashboard.

Solution Preview

Orders by Income Level



Orders by Occupation



Active Window

Table & Matrix Visuals



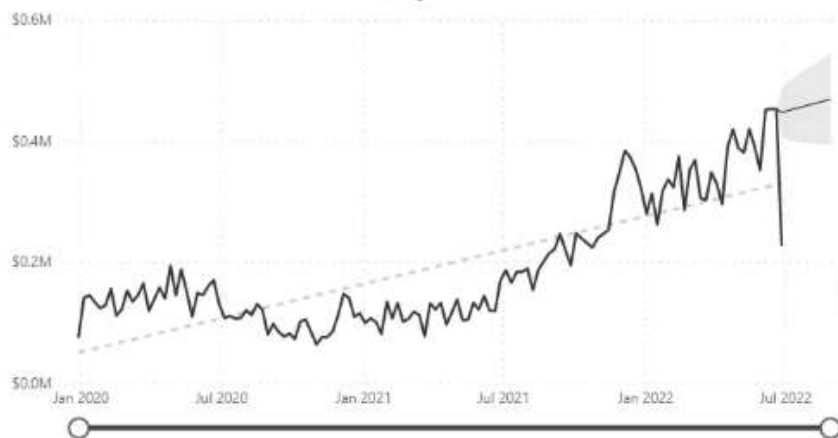
\$24.9M
REVENUE

\$10.5M
PROFIT

25.2K
ORDERS

2.2%
RETURN RATE

Weekly Revenue



Orders by Category



Monthly Revenue

\$1.83M ✓
Prev Month: \$1.77M (+3.31%)

Monthly Orders

2,146 ↓
Prev Month: 2165 (-0.88%)

Monthly Returns

166 ✓
Prev Month: 169 (+1.78%)

Category Name	Product Name	Orders	Revenue	Return %
Accessories	All-Purpose Bike Stand	234	\$37,206	3.42%
Accessories	Bike Wash - Dissolver	850	\$13,563	1.47%
Accessories	Fender Set - Mountain	1,975	\$87,041	1.36%
Accessories	Hitch Rack - 4-Bike	302	\$36,240	2.65%
Accessories	HL Mountain Tire	1,305	\$45,675	3.75%
Accessories	HL Road Tire	795	\$25,917	3.52%
Accessories	Hydration Pack - 70 oz.	695	\$38,218	3.60%
Accessories	HL Mountain Tire	700	\$20,000	2.50%
Total		25,164	\$24,914,587	2.17%

Filters

Search

Filters on this visual

Category Name
is (All)

Orders
is (All)

Product Name
is (All)

Return %
is (All)

Revenue
is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Activer Windows
Accédez aux paramètres pour activer Windows.



\$24.9M

REVENUE

\$10.5M

PROFIT

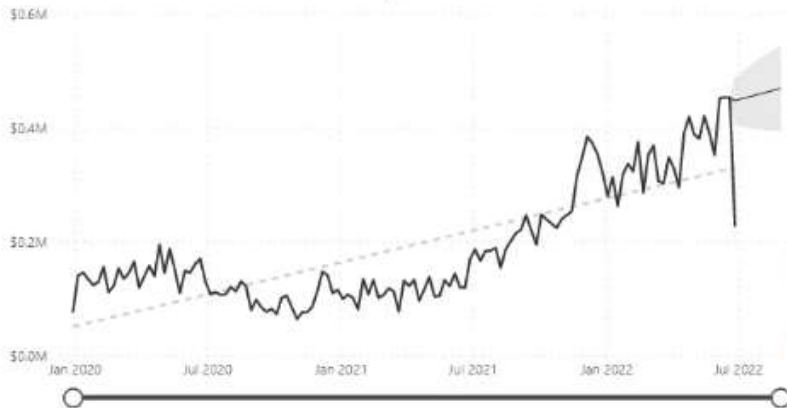
25.2K

ORDERS

2.2%

RETURN RATE

Weekly Revenue



Monthly Revenue

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Prev Month: \$1.77M (+3.31%)

Monthly Orders

2,146 ↑

Prev Month: 2165 (-0.88%)

Monthly Returns

166 ✓

Prev Month: 169 (+1.78%)

Orders by Category



Product Name	Orders	Revenue	Return %
Water Bottle - 30 oz.	3,983	\$39,755	1.95%
Patch Kit/8 Patches	2,952	\$13,506	1.61%
Mountain Tire Tube	2,846	\$28,333	1.64%
Road Tire Tube	2,173	\$17,265	1.55%
Sport-100 Helmet, Red	2,099	\$73,444	3.33%
AWC Logo Cap	2,062	\$35,882	1.11%
Sport-100 Helmet, Blue	1,995	\$67,120	3.31%
Fender Set - Mountain	1,975	\$87,041	1.36%
Sport-100 Helmet, Black	1,940	\$65,270	2.68%
Total	25,164	\$24,914,587	2.17%

Filters

Search

Filters on this visual

Orders
is (All)

Product Name
is (All)

Return %
is (All)

Revenue
is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Format

Search

Visual Properties

Visual

Reset to default

Grid

Values

Column headers

Row headers

Column subtotals On

Row subtotals On

Column grand total

Row grand total

Specific column

Cell elements

Active Windows

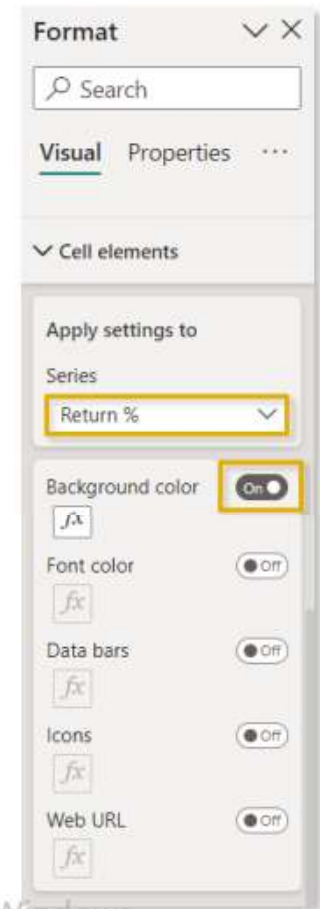
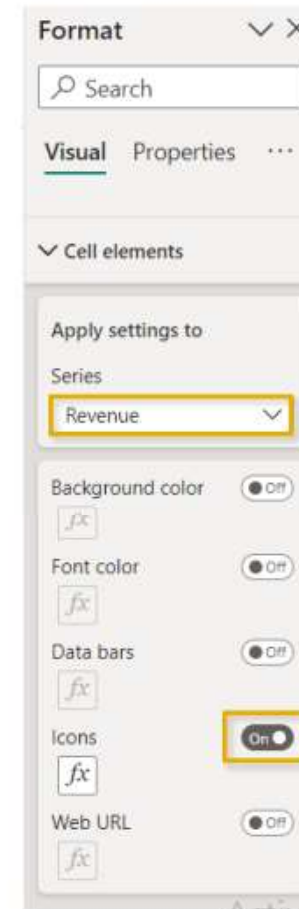
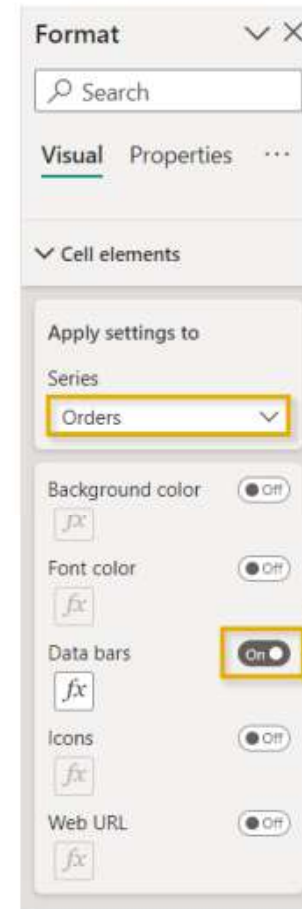


CONDITIONAL FORMATTING

Top 10 Products	Orders	Revenue	Return %
Water Bottle - 30 oz.	3,983	\$39,755	1.95%
Patch Kit/8 Patches	2,952	\$13,506	1.61%
Mountain Tire Tube	2,846	\$28,333	1.64%
Road Tire Tube	2,173	\$17,265	1.55%
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Fender Set - Mountain	1,975	\$87,041	1.36%
Sport-100 Helmet, Black	1,940	\$65,262	2.68%
Mountain Bottle Cage	1,896	\$38,062	2.02%

Conditional formatting allows you to dynamically format Table or Matrix visuals based on cell values

- Conditionally formatting options can be found in the **Format** pane, under **Cell elements**
- Options include background color, font color, data bars, icons, or Web URL



Activer Windows
Accédez aux paramètres pour activer Wi

- Conditional formatting

Top N filtering



\$24.9M

REVENUE

\$10.5M

PROFIT

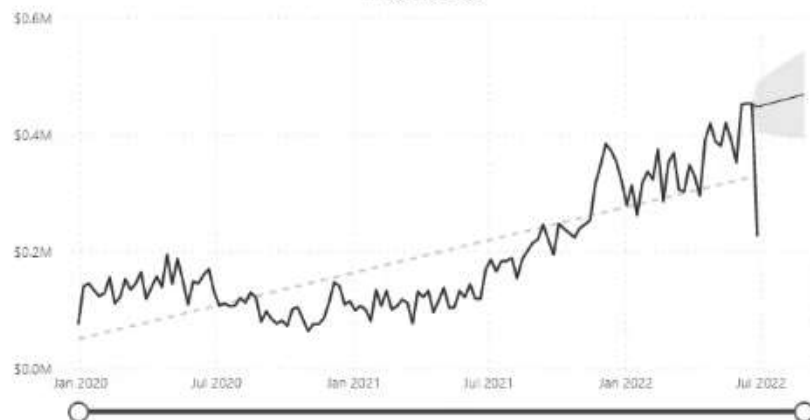
25.2K

ORDERS

2.2%

RETURN RATE

Weekly Revenue



Orders by Category



Product Name	Orders	Revenue	Return %
Water Bottle - 30 oz.	3,983	\$39,755	1.95%
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Sport-100 Helmet, Red	2,099	\$73,444	3.33%
AWC Logo Cap	2,062	\$35,882	1.11%
Sport-100 Helmet, Blue	1,995	\$67,120	3.31%
Fender Set - Mountain	1,975	\$87,041	1.36%
Sport-100 Helmet, Black	1,940	\$65,270	2.68%
Mountain Bottle Cage	1,896	\$38,062	2.02%

\$1.83M✓

Prev Month: \$1.77M (+3.31%)

2,146↑

Prev Month: 2165 (-0.88%)

166✓

Prev Month: 169 (+1.78%)

Filters

Search

Filters on this visual

Orders
is (All)

Product Name

top 10 by Total Orders

Filter type

Top N

Show items

Top

10

By value

Total Orders

Apply filter

Return %

is (All)

Revenue

is (All)

Add data fields here

Data

order

Measure Table

- ☐ % of All Orders
- ☐ All Orders
- ☐ Bulk Orders
- ☐ High Ticket Orders
- ☐ Order Target
- ☐ Previous Month
- ☒ Total Orders
- ☐ Weekend Orders

Sales Data

- ☐ OrderLineItem
- ☐ OrderNumber
- ☐ OrderQuantity

Active Windows

Filters on this page

ASSIGNMENT: TABLES



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Top customer table**

Hey there, this customer report is really coming together!

Since the management team needs a way to identify high-value customers, let's add a table to our report showing customer keys, full names, orders, and revenue.

Probably makes sense to add some conditional formatting and limit to the top 100 customers for now.

Thanks!

Key Objectives

1. Add a **table** to the **Customer Detail** report to show **Customer Key, Full Name, Total Orders** (as "Orders") and **Total Revenue** (as "Revenue")
2. Use conditional formatting to add light gray **data bars** to the orders column and a white > blue **color scale** to the revenue column
3. Add a **visual-level filter (Top N)** to show the 100 customers with the most orders, and add a **chart title** ("Top 100 Customers")
4. **Sort** the table descending by orders

Active Windows

Accédez aux paramètres pour activer Windows.

SOLUTION: TABLES



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Top customer table**

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Since the management team needs a way to identify high-value customers, let's add a table to our report showing customer keys, full names, orders, and revenue.

Probably makes sense to add some conditional formatting and limit to the top 100 customers for now.

Thanks!

-Vic

Solution Preview

Top 100 Customers				
Customer Key	Full Name	Orders	Revenue	
11091	Mr. Dalton Perez	26	\$1,513	
11223	Mrs. Hailey Patterson	26	\$1,616	
11300	Mr. Fernando Barnes	26	\$1,839	
11330	Mr. Ryan Thompson	26	\$1,597	
11331	Mrs. Samantha Jenkins	26	\$1,740	
11185	Mrs. Ashley Henderson	25	\$1,717	
11200	Mr. Jason Griffin	25	\$1,614	
11176	Mr. Mason Roberts	24	\$1,526	
11262	Mrs. Jennifer Simmons	24	\$1,465	
11277	Mr. Charles Jackson	24	\$1,777	
11287	Mr. Henry Garcia	24	\$1,443	
11566	Ms. April Shan	24	\$1,424	
11711	Mr. Daniel Davis	24	\$1,404	
11276	Mrs. Nancy Chapman	23	\$1,111	
11203	Mr. Luis Diaz	17	\$1,002	
11215	Mrs. Ana Perry	17	\$1,336	
11078	Ms. Gina Martin	16	\$991	
Total		1,272	\$615,328	

Active Windows

Top N Text Cards



\$24.9M

REVENUE

\$10.5M

PROFIT

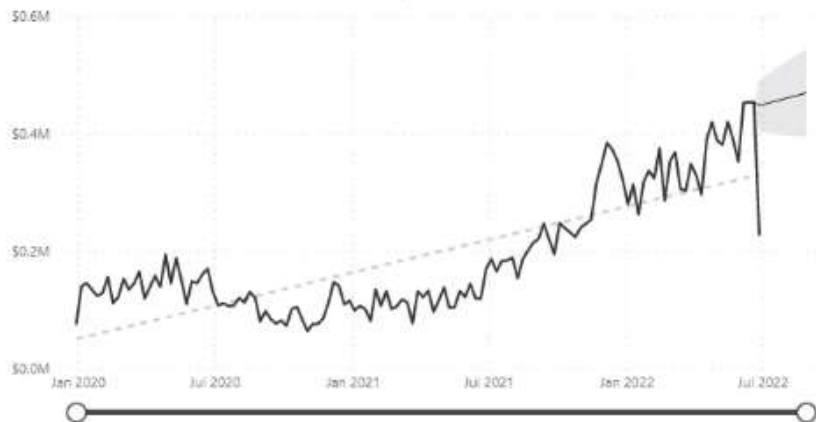
25.2K

ORDERS

2.2%

RETURN RATE

Weekly Revenue



Orders by Category



Top 10 Products

	Orders	Revenue	Return %
Water Bottle - 30 oz.	3,983	\$39,755	1.95%
Patch Kit/8 Patches	2,952	\$13,506	1.61%
Mountain Tire Tube	2,846	\$28,333	1.64%
Road Tire Tube	2,173	\$17,265	1.55%
Sport-100 Helmet, Red	2,099	\$73,444	3.33%
AWC Logo Cap	2,062	\$35,882	1.11%
Sport-100 Helmet, Blue	1,995	\$67,120	3.31%
Fender Set - Mountain	1,975	\$87,041	1.36%
Sport-100 Helmet, Black	1,940	\$65,270	2.68%
Mountain Bottle Cage	1,896	\$38,062	2.02%

Most Ordered Product Type:

Tires and Tubes

Most Returned Product Type:

Shorts

\$1.83M ✓

Prev Month: \$1.77M (+3.31%)

2,146 ↓

Prev Month: 2165 (-0.88%)

166 ✓

Prev Month: 169 (+1.78%)

Filters Search

Filters on this page Add data fields here

Filters on all pages Add data fields here

Data return

Measure Table

- ☐ % of All Returns
- ☐ All Returns
- ☐ Bike Return Rate
- ☐ Bike Returns
- ☐ Previous Month
- ☐ Quantity Return
- ☐ Return Rate
- ☐ Total Returns

Returns Data

- ☐ Return Quantity

Active Windows

ASSIGNMENT: TOP N TEXT CARDS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Top customers by revenue**

Hey,

Ethan is loving the customer report so far – great job!

He mentioned that he'd like to highlight top customers based on *revenue* as well, so I'm thinking we could add some text cards to show the top customer name, along with total revenue and the number of orders placed.

We'll be offering some coupons based on how much customers have spent in the past, so accuracy is critical here!

-Vic

Key Objectives

1. Add a **card** to the **Customer Detail** report to show **Full Name**
2. Add a **visual-level filter (Top N)** to show the top customer (Full Name) in terms of **Total Revenue**
 - What do you notice when you filter the report for low income customers?
(*Hint: check your value against the table*)
 - How could you modify the Top N filter to correct this?
3. Copy and paste the card (x2) to show **Total Orders** and **Total Revenue** for the top customer
4. Add **text boxes** for titles and adjust formatting to match the solution preview

Active Windows

SOLUTION: TOP N TEXT CARDS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Top customers by revenue**

Hey,

Ethan is loving the customer report so far – great job!

He mentioned that he'd like to highlight top customers based on *revenue* as well, so I'm thinking we could add some text cards to show the top customer name, along with total revenue and the number of orders placed.

Solution Preview

Top Customer (by revenue):

Mr. Maurice Shan

Orders:

6

Revenue:

\$12.4K

Active Windows

Accédez aux paramètres pour activer Window



MAP VISUALS

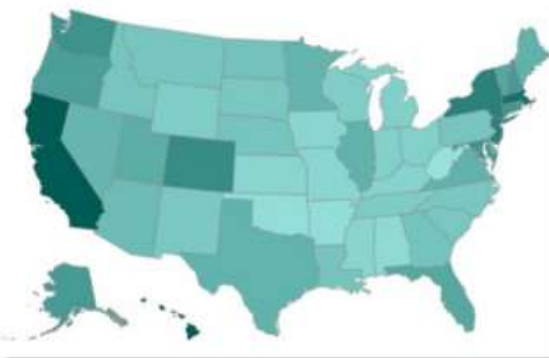
 Map



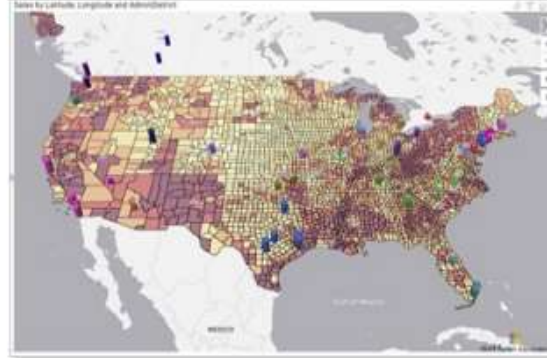
 Filled map



 Shape map



 Azure map



Power BI includes several types of **map visuals** powered by Bing Maps

Tips for creating accurate maps:

1. Assign **categories** to geospatial fields
2. Add **multiple location** fields
3. Use **latitude/longitude** when possible

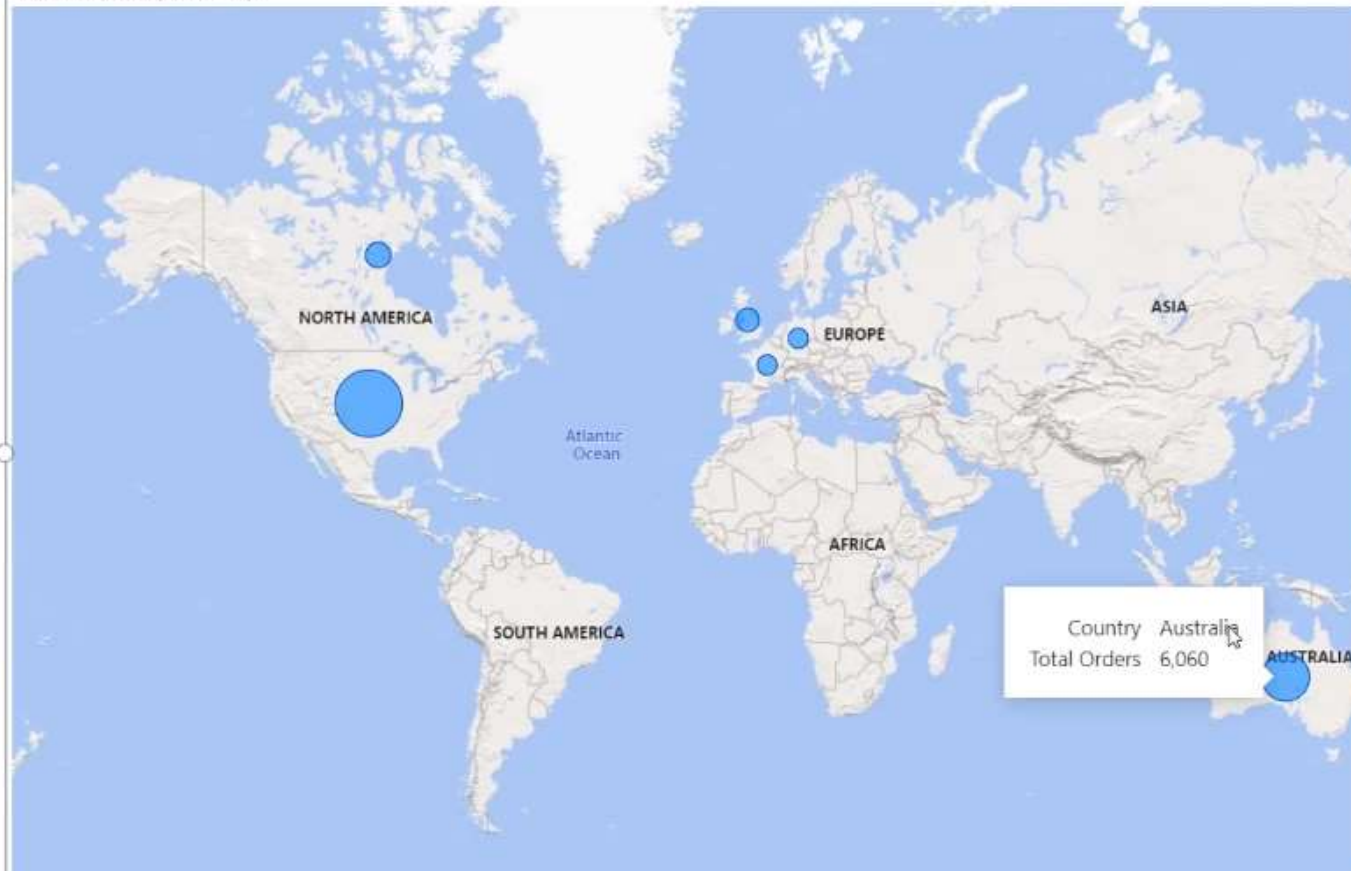


HEY THIS IS IMPORTANT!

An administrator may need to **enable maps in your tenant settings** in order to use them in Power BI Service

**ArcGIS maps require a separate account, and are not pictured here*

Total Orders by Country



Build a visual

Visual types



☐ Off Suggest a type

Location

Country X | >

+Add data

Legend

+Add data

Latitude

+Add data

Longitude

+Add data

Bubble size

Total Orders X | >

Tooltips

+Add data

Filters

Search

Filters on this visual

Country
is (All)

Total Orders
is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Total Orders by Country



Filters

Search

Filters on this visual

Country
is (All)

Total Orders
is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Format

Search

Visual Properties

Text

Font

Segoe UI

10

B *I* U

Label color

Value color

Drill text and icon color

Background

Color

Transparency

10 %

Reset to default

SLICERS



Slicers are visual filters which affect all other visuals on a report page (by default)

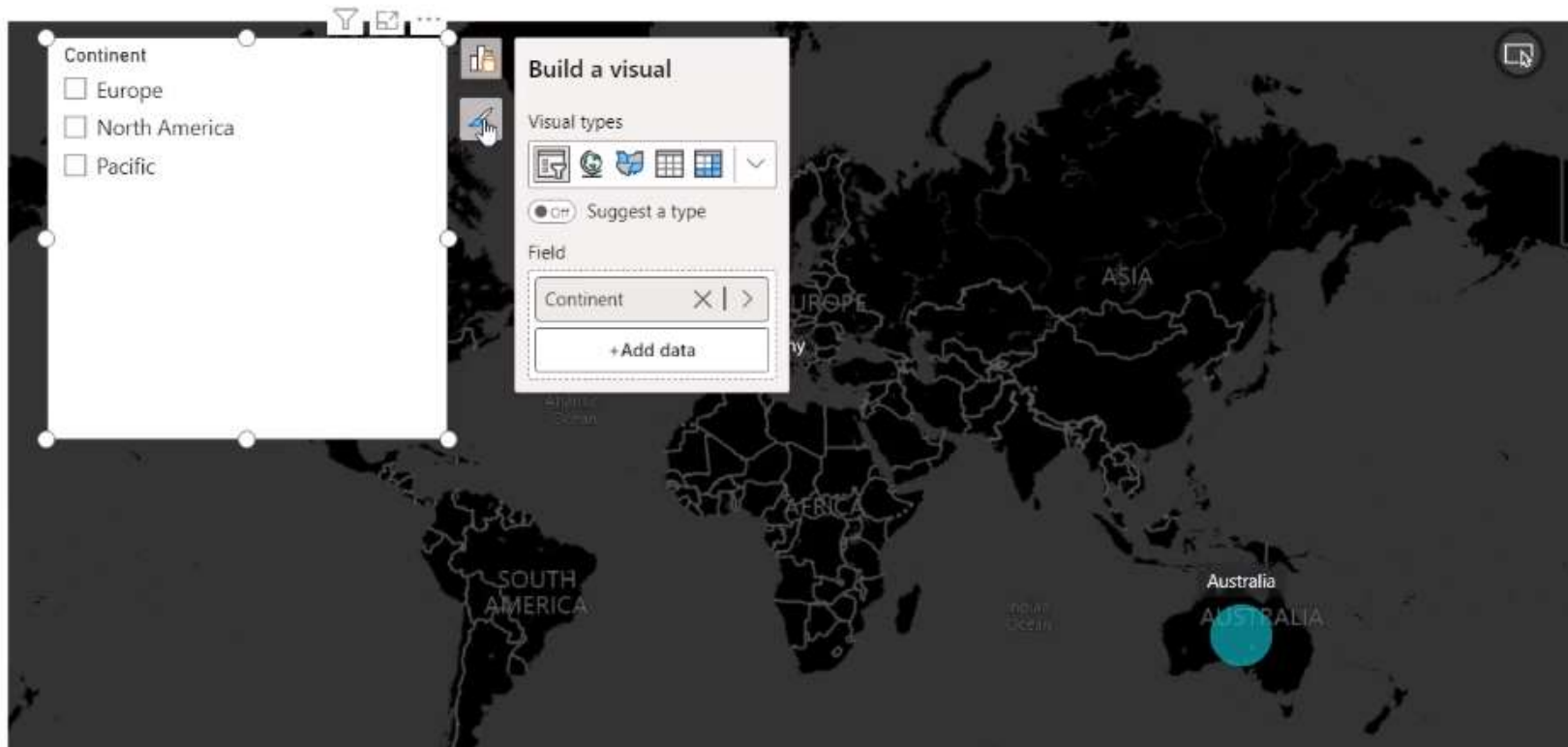
- Slicers can take many formats depending on the data type, including **lists**, **dropdowns**, **tiles**, **ranges**, and more

The diagram illustrates different slicer styles and their visual representations, categorized into three groups:

- Categorical/Text options:** This group shows three styles: 'Vertical list', 'Tile', and 'Dropdown'. Below these, three visual examples are shown: 1) A vertical list of radio buttons for 'IncomeLevel' with options 'Average', 'High', 'Low', and 'Very High'. 2) A dropdown menu for 'IncomeLevel' with 'Average' selected. 3) A horizontal tile selection for 'Continent' with 'Europe', 'North America', and 'Pacific' options, where 'Europe' is selected.
- Date/Time options:** This group shows three styles: 'Between', 'Relative Date', and 'After'. Below these, three visual examples are shown: 1) A date range picker for 'Date' with a range from '1/1/2020' to '6/30/2022' and a corresponding slider. 2) A relative date picker for 'Date' with 'Last', '11', and 'Months' options, showing a range from '3/18/2022' to '2/17/2023'. 3) Another date range picker for 'Date' with a range from '1/1/2020' to '6/30/2022' and a corresponding slider.
- Numeric Range options:** This group shows two styles: 'Single Value' and 'Less than or equal to'. Below these, two visual examples are shown: 1) A single value slider for 'Price Adjustment (%)' with a value of '0.20'. 2) A range slider for 'Price Adjustment (%)' with values from '-1.00' to '0.50'.

PRO TIP: Use **Apply/Clear All Slicers** buttons for more filtering control

Active Windows



Filters

Search

Filters on this visual ...

Continent is (All)

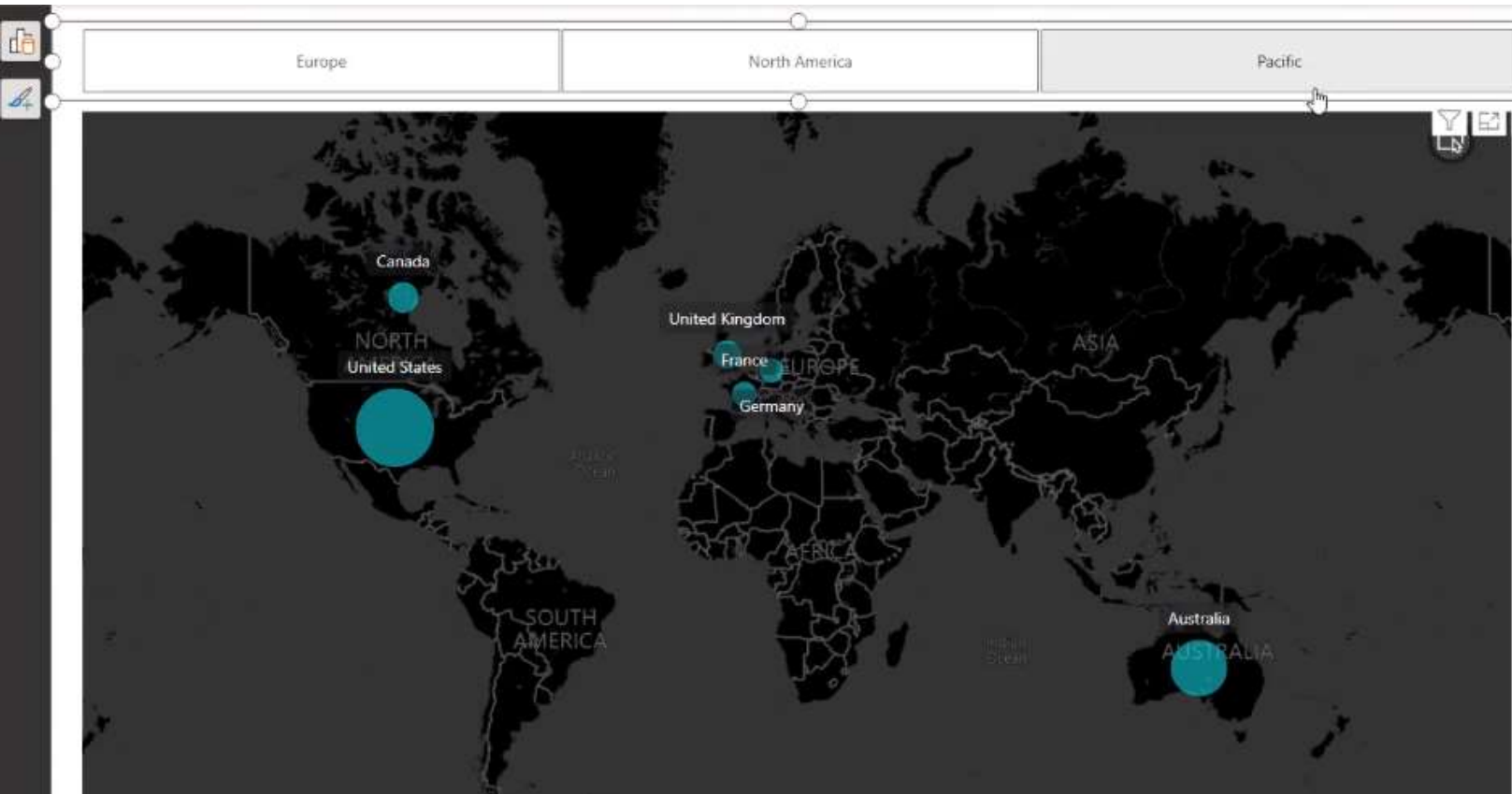
Add data fields here

Filters on this page ...

Add data fields here

Filters on all pages ...

Add data fields here



Filters

Search

Filters on this visual

Continent is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Format

Search

Visual Properties

> Size and style

> Title

Off

> Slicer settings

> Options

Style

Tile

> Selection

Single select

Off

Multi-select with C...

On

Show "Select all" o...

Off

Reset to default

> Slicer header

Off



Filters

Search

Filters on this visual ...

Continent is (All)

Add data fields here

Filters on this page ...

Add data fields here

Filters on all pages ...

Add data fields here

Format

Search

Visual Properties ...

> Size and style

> Title ☐ Off

▼ Slicer settings

▼ Options

Style

Tile

▼ Selection

Single select ☐ Off

Multi-select with C... ☒ On

Show "Select all" o... ☒ On

Reset to default

> Slicer header ☐ Off

> Values

Activer Windows

ASSIGNMENT: SLICERS



NEW MESSAGE

From: **Victor Ignatius Zabel** (*BI Analyst*)

Subject: **Year slicer for customer report**

Hey there, quick request when you get a sec...

Could you please add a slicer to the customer report, so that users can filter the entire page by year?

No preference for which specific type of slicer you use, as long as managers can filter customers for a specific year or across multiple years.

Key Objectives

1. Add a **slicer** to filter the **Customer Detail** report page by **Year**
2. Add a **visual-level filter** to exclude blanks
3. Choose any **slicer style** that allows users to filter individual years or across multiple years

Activer Windows

Accédez aux paramètres pour activer Window

SOLUTION: SLICERS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Year slicer for customer report**

Hey there, quick request when you get a sec...

Could you please add a slicer to the customer report, so that users can filter the entire page by year?

No preference for which specific type of slicer you use, as long as managers can filter customers for a specific year or across multiple years.

Thanks!

Solution Preview

2020

2022



Top Customer (by revenue):

Mr. Maurice Shan

Orders:

6

Revenue:

Active Windows

\$12.4K

Accédez aux paramètres pour activer Windows.

DRILL UP & DRILL DOWN



Build a visual

Visual types

☐ Off Suggest a type

X-axis

Start of Month X | >

Start of Week X | >

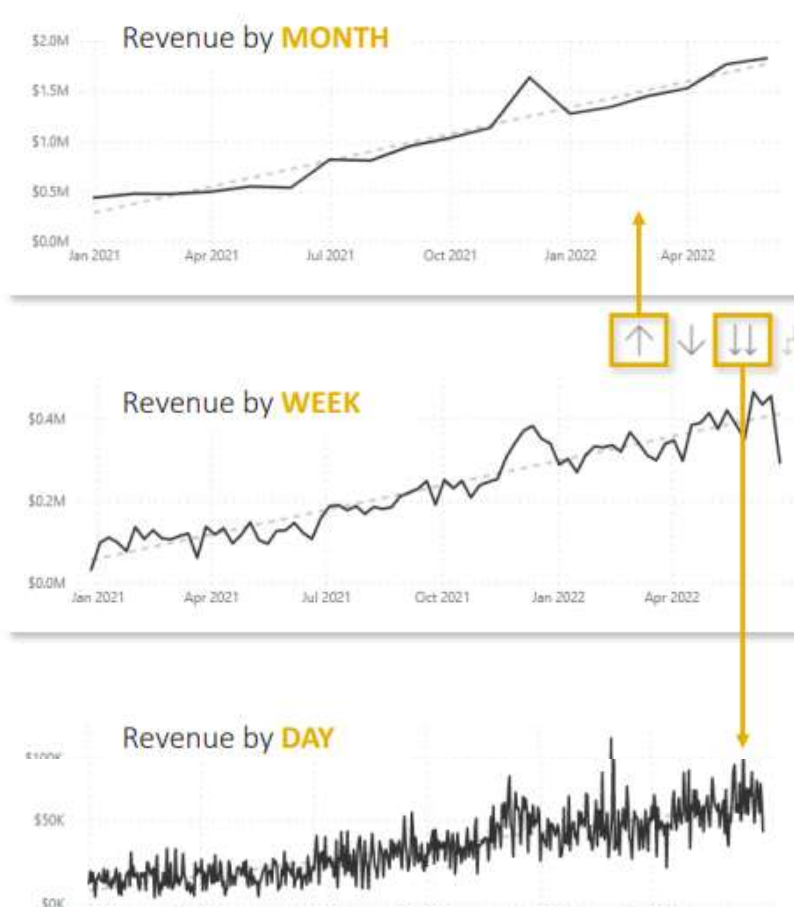
Date X | >

+Add data

Y-axis

Total Revenue X | >

+Add data



Drill Up and **Drill Down** tools allow you to switch between different levels of granularity

- In this example users can “drill up” from **weekly** to **monthly**, or “drill down” to **daily**
- The single down arrow activates **drill mode**, allowing users to drill by clicking data points
- The forked down arrow **expands each level** of the hierarchy (used in matrix visuals)



PRO TIP:

Use **location hierarchies** and enable drill mode to create interactive map visuals

Active Windows

Active Windows

ASSIGNMENT: DRILL DOWN



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Dynamic time periods**

Hey again, just got some feedback from the managers about our customer report.

Chad loves the weekly trending chart, but Thad wants to see the data by *day* and Vlad was hoping for an *annual* breakdown.

Instead of building multiple versions of the same line chart, could you please make it interactive so that Chad, Thad and Vlad get the views they want?

Key Objectives

1. In the **Customer Detail** report, update the X-axis of the line chart to pull in **Date Hierarchy**
2. Use the chart header to **drill up** and **drill down** to explore trends at each level of granularity
3. Test **drill mode** to change the granularity by selecting individual data points in the chart
 - Why do some weeks look very low?
4. Turn off drill mode and show the chart at a weekly level of granularity by default

SOLUTION: DRILL DOWN



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

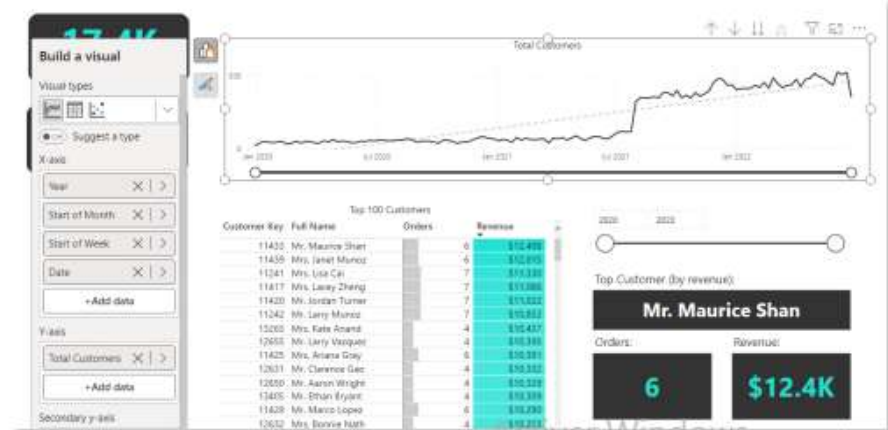
Subject: **Dynamic time periods**

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Instead of building multiple versions of the same line chart, could you please make it interactive so that Chad, Thad and Vlad get the views they want?

Solution Preview



Active Windows

Accédez aux paramètres pour activer Windows



DRILL THROUGH FILTERS

Drill through filters allow users to navigate to a specific report page, pre-filtered on the item selected

- Here we've created a **Product Detail** page, set the type to **Drillthrough**, and configured drill through from **Product Name**
- This means that users can right-click any instance of product name (i.e. in a matrix visual) and use the Drill through option to navigate straight to the Product Detail report filtered on that product (in this case "Mountain Tire Tube")

Top 10 Products	Orders	Revenue	Return %
Water Bottle - 30 oz.	3,983	\$39,755	1.95%
Patch Kit/8 Patches	2,952	\$13,506	1.61%
Mountain Tire Tube	333	1.64%	
Road Tire Tube	265	1.55%	
Sport-100 Helmet, Red	444	3.33%	
AWC Logo Cap	865	1.11%	
Sport-100 Helmet, Blue	112	3.31%	
Fender Set - Mountain	041	1.36%	
Sport-100 Helmet, Black	262	2.68%	
Mountain Bottle Cage	062	2.02%	





REPORT INTERACTIONS

Edit **report interactions** to customize how filters applied to one visual impact other visuals on the page

- Cross-filter options include **filter** (📊), **highlight** (📊) and **none** (🚫), depending on the visual type

Format > Edit Interactions



In this example, selecting a product in the matrix visual:

- Filters** the line chart & KPIs
- Highlights** the bar chart
- Doesn't impact** the text cards

Activer Windows

ASSIGNMENT: REPORT INTERACTIONS



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Weird report interactions**

Hey there,

I was playing with the customer report this morning and noticed some odd visual interactions. For example, selecting a specific customer shouldn't filter the line chart, and probably shouldn't filter the donut charts either.

Could you please take a pass through the report interactions and update any that seem off?

Key Objectives

1. On the **Customer Detail** tab, edit the **report interactions** based on the following logic:
 - When a filter is applied to the line chart, the donut charts should **filter** (not highlight)
 - When a filter is applied to the table, the line chart and donuts should **not filter**
 - The slicer should **filter all visuals** on the report page

Active Windows

Accédez aux paramètres pour activer Windows.



NEW MESSAGE

From: **Victor Ignatius Zabel** (BI Analyst)

Subject: **Weird report interactions**

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Could you please take a pass through the report interactions and update any that seem off?

Thanks!

-Vic

Solution Preview



BONNES PRATIQUES : VISUALISATION DE DONNÉES

Visez la clarté et la simplicité avant tout

- Visez à maximiser l'impact et à minimiser le bruit; tout est question d'équilibrer la conception et les fonctions

Ne vous contentez pas de créer des tables et des graphiques ; créer un récit

- Sans contexte, les données n'ont pas de sens; utiliser des filtres, des signets et des visualisations efficaces pour traduire les données brutes en informations et implications puissantes

Posez-vous toujours les trois questions clés :

1. Quel type de données visualisez-vous? (Entier, catégorique, série chronologique, géospatiale, etc.)
2. Qu'essayez-vous de communiquer? (Relations, compositions, tendances, etc.)
3. Qui est l'utilisateur final qui consomme ces informations? (Analyste, PDG, client, stagiaire, etc.)